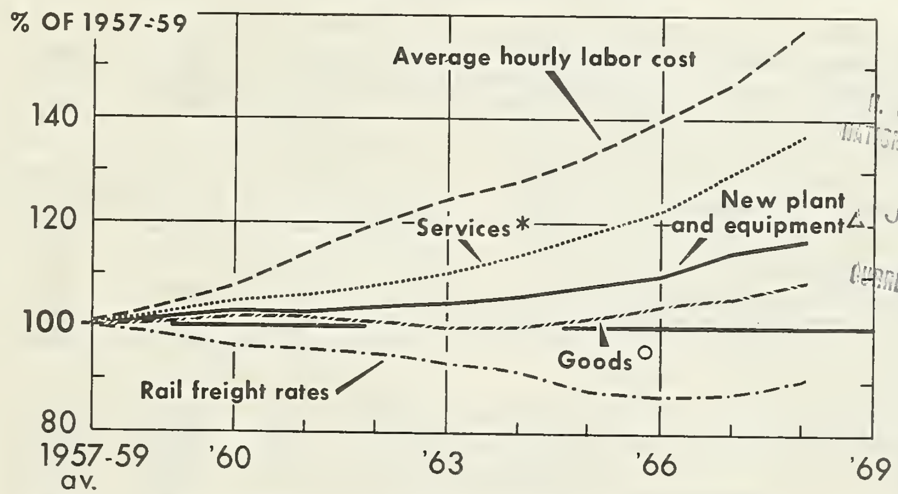
MARKETING and TRANSPORTATION SITUATION

MTS-175

NOVEMBER 1969

PRICES OF INPUTS USED BY FOOD MARKETING FIRMS



*RENT, PROPERTY INSURANCE, TELEPHONE, ETC. ○ CONTAINERS, PACKAGING MATERIALS, UTILITIES, OFFICE SUPPLIES, ETC.
△ GNP IMPLICIT PRICE DEFLATOR FOR PRODUCERS' DURABLE EQUIPMENT AND NONRESIDENTIAL CONSTRUCTION, DEPARTMENT OF COMMERCE.

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MARKET FACTS

Item	Unit or base period	1968 Year	1968 III Qtr	1969 I Qtr.	1969 II Qtr.	1969 III Qtr.
Farm-Retail Price Spreads: 1/						
Retail cost	Dol.	1,118	1,128	1,138	1,161	1,194
Farm value	Dol.	435	444	453	477	492
Farm-retail spread	Dol.	683	684	685	684	702
Farmer's share of retail cost	Pct.	39	39	40	41	41
Retail Prices: 2/						
All goods and services (CPI)	1957-59=100	121.2	121.9	124.8	126.9	128.7
All food	1957-59=100	119.3	120.3	122.1	124.1	127.2
Food at home	1957-59=100	115.9	116.9	118.3	120.3	123.4
Food away from home	1957-59=100	136.3	137.2	140.8	142.9	145.8
Wholesale Prices: 2/						
Food 3/	1957-59=100	112.2	113.3	115.4	118.1	120.2
Cotton products	1957-59=100	105.1	105.3	104.7	104.5	105.6
Woolen products	1957-59=100	103.7	104.0	104.4	104.5	104.9
Agricultural Prices:						
Prices received by farmers	1957-59=100	108	109	110	115	115
Prices paid by farmers, interest, taxes and wage rates	1957-59=100	121	121	125	128	128
Prices of Marketing Inputs:						
Containers and packaging materials	1957-59=100	111	111	114	115	--
Fuel, power, and light	1957-59=100	103	103	104	104	--
Services 4/	1957-59=100	137	139	142	144	--
Hourly Earnings:						
Food marketing employees 5/	Dol.	2.67	2.67	2.79	2.82	2.84
Employees, private nonagricultural sector 2/	Dol.	2.85	2.87	2.97	3.01	3.06
Farmers' Marketings and Income:						
Physical volume of farm marketings	1957-59=100	126	133	109	100	152
Cash receipts from farm marketings 6/	Bil. dol.	44.4	45.0	46.0	48.2	48.0
Farmers' realized net income 6/	Bil. dol.	14.8	15.3	15.0	16.3	16.5
Industrial Production: 7/						
Food manufacturers	1957-59=100	132.7	132.1	136.7	136.5	137.4
Textile mill products	1957-59=100	151.3	151.4	152.6	156.2	154.0
Apparel products	1957-59=100	149.9	149.8	148.7	149.2	149.7
Tobacco products	1957-59=100	120.9	123.5	119.8	115.9	117.6
Retail Sales: 8/						
Food stores	Mil. dol.	73,267	18,491	18,945	18,834	19,010
Eating and drinking places	Mil. dol.	25,285	6,356	6,324	6,510	6,434
Apparel stores	Mil. dol.	19,265	4,933	4,955	5,071	5,126
Consumers' Per Capita Income and Expenditures: 9/						
Disposable personal income	Dol.	2,933	2,946	3,016	3,070	3,139
Expenditures for goods and services	Dol.	2,668	2,705	2,776	2,812	2,858
Expenditures for food	Dol.	494	498	506	507	513
Expenditures for food as percentage of disposable income	Pct.	16.8	16.9	16.8	16.5	16.4

1/ For a market basket of farm foods. 2/ Dept. of Labor. 3/ Processed foods, eggs, and fresh and dried fruits and vegetables. 4/ Includes such items as rent, property insurance and maintenance, and telephone. 5/ Average hourly earnings of production workers in food processing, and nonsupervisory workers in wholesale and retail food trades, calculated from Dept. of Labor data. 6/ Quarterly data seasonally adjusted at annual rates. 7/ Seasonally adjusted, Board of Governors of Federal Reserve System. 8/ Quarterly data seasonally adjusted, Dept. of Commerce. 9/ Seasonally adjusted annual rates, calculated from Dept. of Commerce data. Percentages have been calculated from total income and expenditure data.

MARKETING AND TRANSPORTATION SITUATION

Approved by the Outlook and Situation Board, November 17, 1969

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SUMMARY *

Spurred by continued strong consumer demand, the retail cost of a market basket of farm-originated foods rose to an annual rate of $1,194 in the third quarter of 1969, up 2.8 percent from the previous quarter and 5.8 percent above a year earlier. Higher prices for animal products contributed most to the rise. Retail costs tilted downward in September after gaining each month this year except February.

Gross returns to farmers (farm value) of foods in the market basket averaged $492 in the third quarter--3 percent higher than in the second quarter. Increases resulted mainly from sharply higher returns to farmers for meat animals, broilers, and eggs. There were decreases for most other products in the market basket, particularly fresh fruits and vegetables.

Returns to farmers for market-basket foods in the third quarter of 1969 were up 10.7 percent from a year earlier. Animal products accounted for most of the rise, although returns were also up moderately for other products in the market basket.

Charges for marketing farm foods increased sharply in the third quarter. Marketing charges, as measured by the spread between the retail cost and farm value of the market basket, averaged $702. This was 2.7 percent wider than in the previous quarter and the third quarter of 1968. Spreads widened from the second quarter for many foods, particularly beef. Compared with a year earlier, spreads were wider for all product, groups except eggs, fats and oils, and processed fruits and vegetables.

Farmers received an average of 41 cents of the dollar consumers spent for farm foods in the third quarter of 1969. This was the same share as in the preceding quarter but 2 cents more than in the third quarter of last year.

Strong consumer demand may continue to buoy retail food prices in the first half of 1970. Continued large supplies of farm foods are in prospect and returns to farmers may change little from recent levels. However, the widening marketing spread in prospect for these foods may result in some further, but much smaller, increase in retail prices of farms foods well into next year.

*The summary of this report and a summary table were released to the press on November 17, 1969.

FARM-FOOD MARKET BASKET STATISTICS

Retail Cost: Strong consumer demand helped push retail prices for farm-originated foods to new heights in the third quarter of 1969. Higher meat prices led the way (table 1). The rise in retail food prices continued a general upswing that began in late 1967. However, retail costs turned down in September after having risen every month this year except February (table 2).

The retail cost of the market basket of farm foods 1/ averaged $1,194 (annual rate) in the third quarter of 1969--up $33 or 2.8 percent from the previous quarter (table 2). Retail costs increased for all product groups except fresh vegetables and fats and oils. Prices of meats, poultry, eggs, and fresh fruits were up sharply.

Compared with the third quarter last year, the retail cost of the market basket averaged 5.8 percent higher. Animal products accounted for more than four-fifths of the increase. Retail costs for other product groups except fresh fruit also rose.

In the third quarter of 1969, the retail cost of farm food averaged 22 percent above the 1957-59 average. Most of the increase has occurred since 1964.

Farm value: The farm value of foods in the market basket was $492 (annual rate) in the third quarter--$15 or 3 percent higher than in the preceding quarter. The increase resulted from sharply higher returns to farmers for hogs, broilers, and eggs. In contrast, returns decreased for many other products, especially fresh fruits and vegetables.

Compared with the third quarter last year, returns to farmers for market-basket foods were up 10.7 percent. Higher prices for animal products, especially cattle, hogs, broilers and eggs, accounted for most of the rise. Farm values rose moderately for all other groups except fresh fruits, which decreased sharply.

Farm-Retail Spread: Marketing spreads widened sharply in the third quarter. The spread between the farm value and the retail cost of the farm-food market basket was $702--2.7 percent wider than in the previous quarter and in the third quarter of 1968. Compared with the previous quarter, spreads were wider for all groups except eggs. Spreads for beef widened significantly, but decreased for pork. Compared with a year earlier, spreads were wider for all groups except fats and oils and processed fruits and vegetables.

The market basket farm-retail spread was comparatively stable during the first half of 1969, after decreasing from the final quarter of 1968 (highest quarter of that year). In the first 2 quarters this year, the spread averaged 1 to 2 percent wider than a year earlier.

Farmer's Share: In the third quarter, farmers received an average of 41 cents of the dollar consumers spent for domestic farm foods in retail food stores. This was the same share as in the previous quarter and 2 cents more than a year earlier.

During the 10-year period ended in September 1969, the quarterly average

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1/ The market basket contains the average quantities of domestic, farm-originated food products purchased annually per household in 1960 and 1961 by wage-earners and clerical-worker families and single workers living alone. Its retail cost is calculated from retail prices published by the Bureau of Labor Statistics. The retail cost of the market basket foods is less than the cost of all foods bought per household, since it does not include costs of meals in eating places, imported foods, seafoods or other foods not of farm origin. The farm value is the gross return to farmers for the farm products equivalent to foods in the market basket. The farm-retail spread--difference between the retail cost and farm value--is an estimate of the total gross margin received by marketing firms for assembling, processing, transporting, and distributing the products in the market basket.

Table 1.--The market basket of farm foods by product group: Retail cost, farm value, and farm-retail spread, July-September 1969, April-June 1969, and July-September 1968

Items	July-September 1969	April-June 1969	July-September 1968	Change: July-September 1969 from Apr.-June 1969		Change: July-September 1969 from July-Sept. 1968	
	Dol.	Dol.	Dol.	Dol.	Pct.	Dol.	Pct.
	Retail cost 1/						
Market basket	1194.08	1161.33	1128.32	32.75	2.8	65.76	5.8
Meat products	371.79	349.90	327.71	21.89	6.3	44.08	13.5
Dairy products	209.03	206.63	203.19	2.40	1.2	5.84	2.9
Poultry	53.23	50.07	48.77	3.16	6.3	4.46	9.1
Eggs	43.11	39.90	39.66	3.21	7.4	3.45	8.7
Bakery and cereal products	172.95	172.13	169.93	.82	.5	3.02	1.8
Fresh fruits	55.02	51.78	58.00	3.24	6.2	-2.98	-5.1
Fresh vegetables	74.61	77.28	70.34	-2.67	-3.5	4.27	6.1
Processed fruits and vegetables	125.29	124.95	123.80	.34	.3	1.49	1.2
Fats and oils	37.78	37.84	37.72	-.06	-.2	.06	.2
Miscellaneous products	51.27	50.85	49.20	.42	.8	2.07	4.2
	Farm value 2/						
Market basket	491.65	477.13	444.17	14.52	3.0	47.48	10.7
Meat products	217.03	204.18	181.00	12.85	6.3	36.03	19.9
Dairy products	101.03	100.20	97.25	.83	.8	3.78	3.9
Poultry	27.11	24.65	24.42	2.46	10.0	2.69	11.0
Eggs	28.96	24.78	25.45	4.18	16.9	3.51	13.8
Bakery and cereal products	33.21	33.85	32.22	-.64	-1.9	.99	3.1
Fresh fruits	15.39	17.22	19.04	-1.83	-10.6	-3.65	-19.2
Fresh vegetables	22.98	25.35	21.28	-2.37	-9.3	1.70	8.0
Processed fruits and vegetables	27.00	27.39	25.35	-.39	-1.4	1.65	6.5
Fats and oils	9.68	10.17	9.26	-.49	-4.8	.42	4.5
Miscellaneous products	9.26	9.34	8.90	-.08	-.9	.36	4.0
	Farm-retail spread						
Market basket	702.43	684.20	684.15	18.23	2.7	18.28	2.7
Meat products	154.76	145.72	146.71	9.04	6.2	8.05	5.5
Dairy products	108.00	106.43	105.94	1.57	1.5	2.06	1.9
Poultry	26.12	25.42	24.35	.70	2.8	1.77	7.3
Eggs	14.15	15.12	14.21	-.97	-6.4	-.06	-.4
Bakery and cereal products	139.74	138.28	137.71	1.46	1.1	2.03	1.5
Fresh fruits	39.63	34.56	38.96	5.07	14.7	.67	1.7
Fresh vegetables	51.63	51.93	49.06	-.30	.6	2.57	5.2
Processed fruits and vegetables	98.29	97.56	98.45	.73	.7	-.16	-.2
Fats and oils	28.10	27.67	28.46	.43	1.6	-.36	-1.3
Miscellaneous products	42.01	41.51	40.30	.50	1.2	1.71	4.2

1/ Retail cost of average quantities purchased annually per household in 1960-61 by urban wage-earner and clerical-worker families and single workers living alone, calculated from retail prices collected by the Bureau of Labor Statistics.

2/ Payment to farmer for equivalent quantities of farm products minus imputed value of byproducts obtained in processing.

Table 2. --The market basket of farm foods: Retail cost, farm value, farm-retail spread, and farmer's share of retail cost, averages 1947-49 and 1957-59 annual 1958-69, monthly 1968-69 1/

Year and month	Retail cost	Farm value	Farm-retail spread	Farmer's share
	Dollars	Dollars	Dollars	Percent
Average:				
1947-49	890	441	449	50
1957-59	983	388	595	39
1958	1,009	407	602	40
1959	985	377	608	38
1960	991	383	608	39
1961	997	380	617	38
1962	1,006	384	622	38
1963	1,013	374	639	37
1964	1,014	374	640	37
1965	1,038	408	630	39
1966	1,095	443	652	40
1967	1,080	414	666	38
1968	1,118	435	683	39
1969 2/	1,174	477	697	41
1968 3/				
January	1,098	418	680	38
February	1,100	426	674	39
March	1,104	432	672	39
April	1,110	439	671	40
May	1,114	435	679	39
June	1,117	436	681	39
July	1,124	451	673	40
August	1,132	439	693	39
September	1,128	443	685	39
October	1,131	435	696	38
November	1,125	430	695	38
December	1,129	437	692	39
1969 2/ 3/				
January	1,138	446	692	39
February	1,136	452	684	40
March	1,141	461	680	40
April	1,150	465	685	40
May	1,157	471	686	41
June	1,176	495	681	42
July	1,190	497	693	42
August	1,197	495	702	41
September	1,196	483	713	40

1/ Retail cost of average quantities purchased annually per household in 1960-61 by urban wage-earner and clerical-worker families and single workers living alone, calculated from retail prices collected by the Bureau of Labor Statistics. Data for earlier years are published in Farm-Retail Spreads for Food Products 1947-64, ERS-226, April 1965.

2/ Preliminary.

3/ Annual rates.

farmer's share varied from 36 to 42 cents. It averaged 40 cents or higher in 9 quarters. Three of these were in 1969. The other 6 ran consecutively from the second quarter of 1965 through the third quarter of 1966. During this 1965-66 period, farm prices jumped sharply as a result of reduced supplies of several commodities.

Changes Within Third Quarter: Marketing spreads widened sharply each month in the third quarter because prices at retail did not drop as much as prices at the farm level. Returns to farmers for market-basket foods reached a high for the year in July and declined slightly in August and sharply in September. The retail cost reached a high in August and turned down slightly in September. Consequently, farm-retail spreads widened significantly.

Commodity Highlights

Frying Chicken: Consumer demand for frying chickens continued to strengthen in the third quarter as prices for red meat rose. Despite increased broiler production in the third quarter from both the previous quarter and a year earlier, broiler prices rose at both farm and retail levels (table 17 p. 34). Retail prices rose to a 10-year high of 44.5 cents per pound--up 6.2 percent from the previous quarter and 9.3 percent above a year earlier. The farm value averaged 22.6 cents--up about 11 percent from the previous quarter and 12 percent from a year earlier. Farm-retail spreads widened 1.9 percent from the second quarter and were 6.8 percent above a year earlier (table 18 p. 35).

Eggs: Production of eggs in the third quarter of 1969, although about the same as a year earlier, averaged about 5 percent lower than in the preceding quarter. This more than seasonal decline in supply for the third quarter boosted prices sharply at both farm and retail levels. Retail prices for Grade A large eggs averaged 59.8 cents a dozen nationally in the third quarter--up about 5 cents from both the previous quarter and the third quarter of 1968. Farm values for the same size and grade also increased sharply, averaging 40.2 cents--up 5.8 cents from the second quarter and 4.9 cents above a year earlier.

Beef: In response to continued strong consumer demand and slightly smaller per capita supplies, retail prices for Choice beef climbed sharply to a record level of $1.01 per pound in the third quarter--up 3.1 cents from the previous quarter (table 3). The farm value for Choice beef declined 5.7 cents to 62.8 cents. Consequently, because of these diverse movements, the farm-retail spread widened 8.8 cents from the previous quarter to 38.2 cents. Most of the increase occurred in the wholesale-retail spread. It increased 8.0 cents to 31.3 cents as price decreases at the retail level lagged those at the wholesale level. In contrast, the farm-wholesale spread increased only 0.8 cent to 6.9 cents because price decreases at wholesale level also lagged those at the farm level.

Compared to a year earlier, retail prices of Choice beef averaged 13.5 cents higher in the third quarter, and the farm value was up 5.1 cents. Thus, the farm-retail spread averaged 8.4 cents wider. Marketing spreads accounted for 62 percent of the increase in the retail price; returns to farmers, 38 percent.

Pork: As often happens during periods of rapidly rising prices, marketing spreads for pork decreased in the third quarter of this year. Prices at both farm and retail levels rose sharply in response to strong consumer demand and slightly lower per capita supplies of pork. Retail prices for pork rose to 77.6 cents per pound in the third quarter--up 5.7 cents from the second quarter. Returns to farmers for an equivalent quantity of live hog rose to 46.8 cents--up 6.2 cents. Thus, farm-retail spreads decreased 0.5 cent.

Compared with the third quarter of last year, the retail price for pork cuts was up 8.5 cents per pound, and farm value was up 10.0 cents. As a result, marketing spreads decreased 1.5 cents.

Table 3.--Beef, pork, and lamb: Retail price, wholesale value, farm value, farm-retail spread, and farmer's share of retail price, annual 1966-68, quarterly 1968-69 1/

Date	Retail price per pound 2/	Wholesale value 3/	Gross farm value 4/	Byproduct allowance 5/	Net farm value 6/	Farm-retail spread: Total	Farm-retail spread: Wholesale-retail	Farm-retail spread: Farm-wholesale	Farmer's share
	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Percent
				Beef, Choice grade					
1966	82.4	58.5	57.6	5.3	52.3	30.1	23.9	6.2	63
1967	82.6	59.4	57.0	4.0	53.0	29.6	23.2	6.4	64
1968	86.6	63.1	60.5	3.8	56.7	29.9	23.5	6.4	65
1968									
Jan.-Mar. ...	85.0	62.0	59.2	3.6	55.6	29.4	23.0	6.4	65
Apr.-June ...	85.7	62.3	59.6	3.7	55.9	29.8	23.4	6.4	65
July-Sept. ..	87.5	64.1	61.5	3.8	57.7	29.8	23.4	6.4	66
Oct.-Dec. ...	88.1	64.1	61.8	4.0	57.8	30.3	24.0	6.3	66
1969									
Jan.-Mar. ...	90.1	66.1	63.7	4.0	59.7	30.4	24.0	6.4	66
Apr.-June ...	97.9	74.6	73.3	4.8	68.5	29.4	23.3	6.1	70
July-Sept. ..	101.0	69.7	67.9	5.1	62.8	38.2	31.3	6.9	62
Oct.-Dec. ...									
				Pork					
1966	74.0	57.9	45.9	3.7	42.2	31.8	16.1	15.7	57
1967	67.2	51.5	37.3	2.5	34.8	32.4	15.7	16.7	52
1968	67.4	51.7	36.7	2.2	34.5	32.9	15.7	17.2	51
1968									
Jan.-Mar. ...	66.4	50.4	35.9	2.2	33.7	32.7	16.0	16.7	51
Apr.-June ...	66.9	51.8	36.9	2.1	34.8	32.1	15.1	17.0	52
July-Sept. ..	69.1	53.5	39.0	2.2	36.8	32.3	15.6	16.7	53
Oct.-Dec. ...	67.3	50.9	34.7	2.1	32.6	34.7	16.4	18.3	48
1969									
Jan.-Mar. ...	68.5	52.8	38.4	2.6	35.8	32.7	15.7	17.0	52
Apr.-June ...	71.9	56.5	43.5	2.9	40.6	31.3	15.4	15.9	56
July-Sept. ..	77.6	62.1	50.3	3.5	46.8	30.8	15.5	15.3	60
Oct.-Dec. ...									
				Lamb, Choice grade 7/					
1966	85.6	61.9	57.8	8.8	49.0	36.6	23.7	12.9	57
1967	87.4	62.8	54.4	5.8	48.6	38.8	24.6	14.2	56
1968	93.6	68.2	60.0	6.4	53.6	40.0	25.4	14.6	57
1968									
Jan.-Mar. ...	91.2	64.6	57.3	6.6	50.7	40.5	26.6	13.9	56
Apr.-June ...	93.8	71.5	62.2	6.5	55.7	38.1	22.3	15.8	59
July-Sept. ..	94.6	67.7	60.1	6.2	53.9	40.7	26.9	13.8	57
Oct.-Dec. ...	95.0	69.0	60.3	6.3	54.0	41.0	26.0	15.0	57
1969									
Jan.-Mar. ...	96.7	71.6	64.4	8.2	56.2	40.5	25.1	15.4	58
Apr.-June ...	100.8	77.2	68.0	8.0	60.0	40.8	23.6	17.2	60
July-Sept. ..	104.7	76.3	67.6	6.9	60.7	44.0	28.4	15.6	58
Oct.-Dec. ...									

1/ Data for beef and pork have been extensively revised. For discussion of the revision see article in this issue, "Revised Price Spreads for Beef and Pork." 2/ Estimated weighted average price of retail cuts. 3/ Wholesale value of quantity of carcass equivalent to 1 lb. of retail cuts: Beef, 1.41 lb.; pork, 1.07 lb.; lamb, 1.18 lb. 4/ Payment to farmer for quantity of live animal equivalent to 1 lb. of retail cuts: Beef, 2.28 lb.; pork 1.97 lb.; lamb, quantity varies by months from 2.42 lb. in May to 2.48 lb. in October. 5/ Portion of gross farm value attributed to edible and inedible byproduct. 6/ Gross farm value minus byproduct allowance. 7/ Revised.

Fresh Fruits: The retail cost of fresh fruits in the market basket averaged 5 percent lower in the third quarter of 1968. The farm value was down 19 percent and the farm-retail spread was 2 percent wider. Apples and oranges accounted for much of the change in these totals (tables 17 and 18, pp. 34-35). Returns to growers for oranges were down more than half, in response to a return to near-normal production of California Valencia oranges this year following the small crop in 1968. Although retail prices for oranges were sharply lower, marketing spreads were wider in the third quarter than a year earlier. Both prices and spreads for apples were lower compared with the third quarter of last year. In contrast, prices and spreads for lemons were higher.

Fresh Vegetables: Farm-retail spreads for fresh vegetables in the third quarter increased 5 percent from a year earlier. Retail prices and farm values increased for most vegetables. Because increases at retail were greater than at the farm level, marketing spread increased significantly. Compared with the third quarter last year, increases in marketing spreads for major vegetables were as follows: cabbage, 5 percent; tomatoes, 9 percent; potatoes, 6 percent; and lettuce, 6 percent. In contrast, although retail costs and farm values for fresh vegetables in the third quarter averaged sharply lower than in the second quarter, farm-retail spreads hardly changed.

Outlook for the First Half of 1970:

Marketing spreads for farm foods are expected to widen in the first half of 1970. Returns to farmers have declined from the peak levels in the summer but little change is expected in the first half of 1970. Thus, retail prices for these foods in the first half of next year may rise somewhat from recent levels. Continued inflationary conditions and strong consumer demand are expected to support food prices; however, sharp price increases are not anticipated. Continued large per capita supplies are in prospect.

Operating costs of food marketing firms likely will rise in 1970. Hourly earnings and fringe benefits of food marketing employees are expected to continue rising, slightly more than offsetting increases in output per man-hour. Prices of most inputs bought by marketing firms are expected to be higher next year.

The farmer's share of the consumer's dollar spent for food in the market basket during the first half of next year probably will average 40 cents--the same as in the first half of 1969.

The Marketing and Transportation Situation is published in February, May, August, and November.

The next issue is scheduled for release in February 1970.

COSTS AND PROFITS IN MARKETING FARM PRODUCTS

Labor Costs

Hourly earnings of employees in food marketing have been rising at an increasing rate for several years. Employees of food marketing establishments earned an average of $2.82 per hour in August this year--6 percent more than in August of 1968 (table 4). This increase is nearly double the annual increase in hourly earnings in 1965 and substantially greater than the average annual increase of 3.9 percent the past decade.

Increases in average hourly earnings of food marketing employees between August 1968 and August 1969 were fairly comparable with those in other lines of manufacturing and trade. Hourly earnings in food manufacturing establishments averaged $2.93 in August this year--5.8 percent higher than last year. In all manufacturing establishments, average earnings were up 7 percent. In the wholesale food trade, hourly earnings averaged $3.01 per hour in August--6.0 percent more than a year earlier. This compares with an average increase of 6.6 percent in all wholesale trades. Earnings of employees in retail food stores averaged $2.54 per hour--6.7 percent more than in August 1968. Employees in all retail establishments earned 6.5 percent more in August this year than a year ago.

Hourly earnings of food marketing employees averaged lower than earnings of employees in the entire private nonagricultural sector of the economy. Earnings averaged $2.67 per hour for food marketing employees in 1968, compared with $2.85 per hour in the entire nonagricultural sector of the economy, which includes production workers in such occupations as mining and manufacturing, construction, and nonsupervisory jobs in wholesale and retail trades, finance, and insurance.

For most years the past decade, costs of labor per unit of product marketed have not risen as much as labor costs per hour. Labor cost per hour (wages, salaries, and fringe benefits) increased 58 percent from 1957-59 to 1968. 1/ Much of this rise was offset by gains in output per man-hour, so that labor costs per unit of food marketed rose only 26 percent. Most of the increase in unit marketing costs has occurred since 1964.

Recent estimates of gains in output per man-hour in food marketing are available only for food manufacturing (table 5). From 1967 to 1968, output per man-hour in factories manufacturing farm-originated food products increased 2.9 percent, compared with a general increase of 3.3 percent in the entire private nonfarm sector of the economy (trade and service industries as well as manufacturing). Between 1959 and 1968, however, output per man-hour in food manufacturing increased at an average rate of 3.5 percent per year, slightly more than the 3.1 percent increase in output per man-hour in the entire private nonfarm sector. Total output in food manufacturing increased 31 percent during this period, although man-hours worked decreased 4 percent.

Average hourly earnings of employees in establishments manufacturing and retailing nonfood farm products also have increased substantially in recent years (table 6). In 1968, hourly earnings of employees in retail apparel stores and plants manufacturing textile mill products, apparel and related products, and tobacco products increased between 7 and 10 percent. Some further increases occurred in the first 8 months of 1969.

1/ This increase in labor cost per hour is greater than the increase (47 percent) in average hourly earnings shown by data in table 4. This difference arises mainly because labor cost per hour includes fringe benefits, earnings of workers in away-from-home eating places, and earnings of nonproduction workers in food-manufacturing establishments and supervisory workers in wholesale and retail-food establishments.

Table 4.--Hourly earnings of employees of firms marketing food, averages 1947-49 and 1957-59, annual 1958-68, monthly 1968-69

Year and month	Manufacturers	Wholesalers	Retail food stores	All food marketing 1/
	Dollars			
Averages:				
1947-49	1.14	1.17	1.01	1.11
1957-59	1.94	1.89	1.58	1.82
1958	1.94	1.89	1.59	1.82
1959	2.02	1.97	1.60	1.88
1960	2.11	2.03	1.68	1.96
1961	2.17	2.09	1.76	2.03
1962	2.24	2.16	1.83	2.10
1963	2.30	2.23	1.90	2.16
1964	2.37	2.28	1.98	2.23
1965	2.43	2.36	2.06	2.30
1966	2.52	2.49	2.13	2.40
1967	2.64	2.66	2.23	2.52
1968	2.80	2.83	2.38	2.67
1968				
January	2.74	2.77	2.30	2.61
February	2.75	2.81	2.34	2.63
March	2.77	2.81	2.35	2.65
April	2.78	2.83	2.35	2.66
May	2.80	2.85	2.37	2.68
June	2.80	2.81	2.38	2.67
July	2.79	2.81	2.39	2.67
August	2.77	2.84	2.38	2.66
September	2.80	2.86	2.41	2.69
October	2.81	2.86	2.43	2.70
November	2.85	2.88	2.44	2.73
December	2.87	2.88	2.43	2.74
1969				
January	2.91	2.93	2.46	2.77
February	2.91	2.97	2.50	2.79
March	2.93	2.98	2.51	2.81
April	2.94	2.98	2.51	2.81
May	2.95	2.99	2.54	2.83
June	2.94	2.96	2.54	2.82
July	2.97	2.97	2.55	2.84
August	2.93	3.01	2.54	2.82
September	2.95			

1/ Weighted composite earnings of production employees in food manufacturing and nonsupervisory employees in wholesale and retail food trades calculated by the Economic Research Service from data of the U.S. Dept. of Labor.

Table 5.--Output per man-hour in establishments manufacturing farm-originated foods, by industry, 1959-68 1/

(1957-59=100)

Year	All Foods 2/			Meat products 3/			Manufactured dairy products 4/			Processed fruits and vegetables 5/		
	Output	Man-hours	Output per man-hour	Output	Man-hours	Output per man-hour	Output	Man-hours	Output per man-hour	Output	Man-hours	Output per man-hour
1959	104	100	104	102	98	105	103	97	106	105	101	104
1960	107	100	107	107	97	111	106	100	105	112	103	109
1961	111	99	112	108	93	116	111	98	113	121	104	116
1962	116	98	118	110	92	120	114	92	124	130	104	125
1963	118	95	125	116	91	128	115	85	136	126	102	123
1964	124	97	128	124	97	129	119	84	141	134	104	129
1965	125	96	130	121	90	134	119	82	145	137	108	128
1966	128	96	134	126	88	143	117	84	139	145	111	131
1967	132	96	137	132	89	148	121	83	145	151	111	135
1968	136	96	141	135	89	152	123	80	153	156	109	142

Year	Grain-mill products 6/			Bakery products 7/			Sugar 8/			Confectionery 9/		
	Output	Man-hours	Output per man-hour	Output	Man-hours	Output per man-hour	Output	Man-hours	Output per man-hour	Output	Man-hours	Output per man-hour
1959	105	101	104	103	101	102	108	101	107	104	99	105
1960	109	101	108	104	101	103	110	99	111	107	99	108
1961	114	100	114	105	99	106	118	102	115	110	100	110
1962	119	99	120	108	98	110	123	98	126	111	101	110
1963	125	93	135	110	92	120	145	107	135	116	96	122
1964	129	94	137	113	92	122	151	116	131	121	98	123
1965	129	93	139	115	91	126	140	108	130	124	98	126
1966	131	92	143	115	90	127	143	105	136	131	99	132
1967	131	91	145	115	88	131	140	101	139	134	100	134
1968	134	93	144	120	89	135	165	105	158	135	98	137

1/ Man-hour indexes are based on hours worked by all employees. Output per man-hour indexes were computed from unrounded figures. Data for 1964-68 are preliminary. 2/ Poultry-dressing plants and establishments primarily engaged in manufacturing shortening and cooking oils, margarine, macaroni, and spaghetti, as well as industry groups shown in this table. 3/ Meat-packing plants and establishments specializing in prepared meat products. 4/ Establishments primarily engaged in manufacturing creamery butter, natural cheese, concentrated milk, ice cream and ices, and special dairy products; excludes processing of fluid milk and cream. 5/ Establishments primarily engaged in canning fruits and vegetables, freezing fruits and vegetables, and manufacturing pickles and sauces. 6/ Establishments primarily engaged in manufacturing flour and meal, cereal products, rice milling, blended and prepared flour, and corn wet milling products. 7/ Establishments primarily engaged in manufacturing biscuits and crackers, wholesale bakeries, grocery chain bakeries, home-service bakeries, and retail multi-outlet bakeries (excluding nonbaking outlets except those retail units at the same location as the bakery). 8/ Establishments primarily engaged in manufacturing raw cane sugar from domestically grown cane and plants mainly engaged in the production of beet sugar. 9/ Establishments primarily engaged in manufacturing candy and other confections.

Table 6.--Hourly earnings of employees of firms marketing nonfood agricultural products, averages 1947-49 and 1957-59, annual 1958-68, monthly 1968-69 1/

Year and month	Manufactures			Retail apparel and accessories stores
	Tobacco	Textile-mill products	Apparel and related products	
	Dollars			
Averages:				
1947-49	0.95	1.12	1.20	1.02
1957-59	1.59	1.51	1.54	1.39
1958	1.59	1.49	1.54	1.39
1959	1.64	1.56	1.56	1.44
1960	1.70	1.61	1.59	1.46
1961	1.78	1.63	1.64	1.50
1962	1.85	1.68	1.69	1.55
1963	1.91	1.71	1.73	1.59
1964	1.95	1.79	1.79	1.63
1965	2.09	1.87	1.83	1.71
1966	2.19	1.96	1.89	1.79
1967	2.27	2.06	2.03	1.89
1968	2.49	2.21	2.21	2.03
1968				
January	2.35	2.14	2.11	1.96
February	2.47	2.16	2.18	1.98
March	2.48	2.17	2.19	1.99
April	2.56	2.15	2.18	2.03
May	2.61	2.17	2.19	2.03
June	2.63	2.18	2.20	2.03
July	2.63	2.17	2.19	2.04
August	2.45	2.24	2.23	2.03
September	2.37	2.26	2.26	2.07
October	2.37	2.27	2.27	2.07
November	2.51	2.27	2.26	2.08
December	2.55	2.28	2.26	2.07
1969				
January	2.57	2.28	2.28	2.11
February	2.63	2.27	2.27	2.11
March	2.66	2.29	2.29	2.09
April	2.68	2.30	2.28	2.12
May	2.74	2.30	2.29	2.15
June	2.79	2.31	2.30	2.15
July	2.77	2.35	2.29	2.15
August	2.51	2.38	2.31	2.13
September	2.50	2.40	2.34	

1/ U.S. Department of Labor; production workers or nonsupervisory workers only.

Transportation Charges

The combined index of railroad freight rates for all agricultural commodities was 90 last year (1957-59=100)--up 2 points from the previous year (table 7). Freight rate indexes went up more for food products than other products. The combined index for food products increased from 88 in 1967 to 92 in 1968. Freight rate indexes increased for all farm commmodities except cotton.

Rail freight rates for most farm commodities decreased for several years following 1958 and then leveled off in the mid-1960's. The general increase in freight rate indexes in 1968 reflected a series of rate increases granted by the ICC in 1967 and 1968. An additional across-the-board increase in rates of 6 percent was granted by the ICC to become effective November 18, 1969.

The combined index of railroad freight rates for products that move into domestic food consumption is presented for the first time. Rates are weighted by volumes of commodities moving into domestic food uses. Consequently, rates for fruits and vegetables, livestock, and meats have a much larger weight than do rates for grains and soybeans. In addition to indicating trends in rates, the food index is used with an index of volume of food marketed to estimate the transportation cost component of the marketing bill for farm foods.

Other Costs

Prices of goods and services (not including raw materials and labor) bought by food marketing firms are expected to average 3 to 4 percent higher this year than in 1968. In the first half of 1969, prices of containers, packaging materials, fuel, power and light averaged about 3 percent higher than in the first half of 1968. Over the same period, prices of services (such as rent, property, insurance, telephone and maintenance) rose about 6 percent.

Between 1957-59 and 1968, prices of intermediate goods and services rose a total of 20 percent. Most of this increase occurred after 1965. Prices of services rose 37 percent while prices of goods increased only 8 percent (table 8).

Continued tight money boosted interest rates charged by banks on short-term loans to business firms in 35 centers to an average of 8.82 percent in August of this year. This rate was nearly 2 percentage points higher than August a year earlier. Short-term rates averaged 6.68 percent in 1968 and 5.99 percent in 1967. The cost of long-term credit also has risen.

Corporate Profits

Food manufacturers and retailers. Profits after taxes as a percentage of sales of corporations manufacturing food and kindred products (excluding alcoholic beverages) averaged about the same the first half of 1969 as last year (table 9). However, profits as a percentage of stockholder equity increased slightly as a result of increased sales relative to net worth. Profits as a percentage of stockholder equity were down in 1968 compared with 1967, while profits as a percentage of sales remained the same.

Profits of 15 leading retail food chains after taxes averaged 1.1 percent of sales in the first half of 1969--up 0.1 percentage point from the same period a year earlier. Profits as a percentage of sales of these chains were the same in 1968 and 1967.

Manufacturers of nonfood products. The direction of profit ratios of corporations manufacturing nonfood agricultural products was mixed in the first half of 1969. Profit ratios were slightly lower in the first quarter of 1969 than a year earlier, then increased in the second quarter. Profit ratios were higher for textile and apparel manufacturers in 1968 than in 1967, but lower for tobacco manufacturers.

Table 7.--Railroad freight rate indexes for specified agricultural commodities, 1957-68 1/

(1957-59=100)

Year	Livestock	Meat	Fruits and vegetables	Wheat	All grains
1957......	98	109	104	99	99
1958......	102	100	101	101	102
1959......	100	92	95	100	99
1960......	99	92	93	99	98
1961......	98	92	94	99	97
1962......	96	91	93	96	96
1963......	94	89	92	95	94
1964......	93	86	92	92	92
1965......	93	79	92	83	86
1966......	93	76	92	82	85
1967......	94	76	93	83	86
1968......	98	78	96	85	87

Year	Soybeans	Cotton	Wool	Tobacco	Combined index: Food products 2/	Combined index: All products 3/
1957......	97	100	106	108	102	102
1958......	102	101	108	101	102	101
1959......	101	100	85	91	96	97
1960......	101	99	82	90	95	96
1961......	96	99	82	91	95	96
1962......	94	99	72	91	93	95
1963......	89	99	70	91	92	93
1964......	88	98	67	91	92	92
1965......	88	98	67	91	88	88
1966......	88	98	67	90	88	87
1967......	88	98	67	91	88	88
1968......	90	98	68	93	92	90

1/ All indexes are of the weighted aggregative type and are based upon averages of rates in effect during the year. Annual averages are computed by weighting rates by the number of days they are in effect.

2/ In constructing the all farm food index, food product groups are weighted by average quantities marketed domestically in 1957-59.

3/ In constructing the all farm product index, farm product groups are weighted by average revenues for 1957-59.

Data for 1945-56 are published in the Marketing and Transportation Situation, MTS-147, November 1962.

Table 8.--Prices of inputs bought by food marketing firms, annual 1955-68, quarterly 1968-69

(1957-59=100)

Year and quarter	Intermediate goods and services					New plant and equipment 3/	Yields on high-grade long-term bonds, per annum 4/
	Total	Goods			Services 2/		
		Total 1/	Containers and packaging materials	Fuel, power, and light			
							Percent
1955	91	91	90	92	90	87	3.06
1956	95	96	96	96	93	92	3.36
1957	98	99	99	102	97	98	3.89
1958	100	100	101	99	100	100	3.79
1959	102	101	100	100	103	102	4.38
1960	103	102	102	102	105	103	4.41
1961	104	102	101	104	106	103	4.35
1962	104	101	102	103	108	104	4.33
1963	104	100	101	102	110	105	4.26
1964	106	100	101	102	114	106	4.40
1965	108	102	102	102	118	108	4.49
1966	112	104	106	103	123	110	5.13
1967	116	106	107	104	130	114	5.51
1968	120	108	111	103	137	117	6.18
1968							
Jan.-Mar.	118	107	109	103	134	116	6.13
Apr.-June	119	109	111	103	136	117	6.25
July-Sept.	121	109	111	103	139	118	6.08
Oct.-Dec.	122	109	112	103	140	118	6.24
1969							
Jan.-Mar.	123	111	114	104	142	120	6.70
Apr.-June	124	112	115	104	144	121	6.89
July-Sept.							7.06
Oct.-Dec.							

1/ Also includes prices of office supplies, restaurant supplies, and many other goods.
2/ Rent, property insurance and maintenance, telephone, etc.
3/ Implicit price deflator for investment in nonresidential structures and producers' durable equipment, gross national product, U.S. Dept. of Commerce.
4/ Aaa corporate bonds; Moody's Investor Service. These yields are indicative of the cost of current long-term borrowings.

Table 9.--Net profits (less provision for taxes on income) as percentage of stockholders' equity and sales of manufacturers of food, textiles, apparel and tobacco, and 15 retail food chains, annual 1957-68, quarterly 1968-69

Year and quarter	Manufacturing corporations 1/				15 retail food chains 3/
	Food 2/	Textile-mill products	Apparel and other finished products	Tobacco	
	Profits as percentage of stockholders' equity				
1957..........	8.8	4.0	6.3	12.5	14.9
1958..........	9.2	3.5	5.0	13.5	14.5
1959..........	9.6	7.5	8.7	13.5	13.4
1960..........	9.2	5.8	7.7	13.5	13.0
1961..........	9.4	5.0	7.3	13.8	12.0
1962..........	9.2	6.2	9.3	13.2	11.7
1963..........	9.3	6.1	7.7	13.4	11.4
1964..........	10.4	8.6	11.9	13.4	11.5
1965..........	11.0	10.9	12.8	13.4	11.3
1966..........	11.5	10.3	13.8	14.3	11.4
1967..........	11.1	7.6	12.2	14.6	10.3
1968..........	10.9	8.8	13.0	14.2	10.3
1968					
Jan.-Mar. ..	10.4	7.1	12.0	13.5	---
Apr.-June...	10.3	9.1	9.3	13.6	---
1969					
Jan.-Mar. ..	10.1	7.2	10.3	12.1	---
Apr.-June...	11.0	8.8	11.4	14.8	---
	Profits as percentage of sales				
1957..........	2.1	1.8	1.3	5.2	1.3
1958..........	2.1	1.6	1.0	5.4	1.3
1959..........	2.3	3.0	1.5	5.4	1.3
1960..........	2.2	2.5	1.4	5.5	1.3
1961..........	2.2	2.1	1.3	5.7	1.2
1962..........	2.2	2.4	1.6	5.7	1.2
1963..........	2.2	2.3	1.4	5.9	1.2
1964..........	2.5	3.1	2.1	5.9	1.3
1965..........	2.6	3.8	2.3	5.9	1.2
1966..........	2.5	3.6	2.4	5.9	1.2
1967..........	2.4	2.9	2.3	5.9	1.1
1968..........	2.4	3.1	2.4	5.5	1.1
1968					
Jan.-Mar. ..	2.4	2.7	2.5	5.7	1.0
Apr.-June...	2.3	3.2	1.9	5.5	1.0
1969					
Jan.-Mar. ..	2.3	2.7	2.2	4.6	1.1
Apr.-June...	2.4	3.2	2.2	5.2	1.1

1/ Compiled from data in Quarterly Financial Report for Manufacturing Corporations 1957-69 issues, published by the Federal Trade Commission and Securities and Exchange Commission.
2/ Food and kindred products excluding alcoholic beverages.
3/ Compiled from Moody's Industrial Manual and company annual reports.

RECENT DEVELOPMENTS IN MARKETING

Output of food manufacturers, as reported by the Federal Reserve Board, averaged 4 percent more the first 7 months of this year than in the same period of 1968. Textile mill output was up about 4 percent and apparel manufacturers' output was up less than 1 percent during the first 6 months of 1969. Output of the tobacco industry decreased about 2 percent.

During the first 8 months of 1969 the value of sales of retail food stores was up 3 percent while prices of food in these stores were up 4 percent. Sales in eating places were 4 percent larger, and prices averaged 6 percent higher.

Exports of Farm Products

Exports of U.S. farm products have declined for the second year in a row. They totaled $5.7 billion in fiscal year 1969 ended June 30--down 9 percent from fiscal year 1968. Mainly to blame were two major developments--the longshoreman's strike at Atlantic and Gulf ports and reduced foreign demand for U.S. grains as buyers abroad were able to purchase grains elsewhere. Commercial exports (including barter) were $4.8 billion compared with $5.0 billion in fiscal year 1968. Substantial declines occurred in exports of cotton, wheat, feed grains, rice and vegetable oils. Increases were reported for meats, hides and skins, fruits and vegetables, soybeans and unmanufactured tobacco.

Investment in Plant and Equipment

Food and beverage manufacturing firms are investing an estimated $1.6 billion in new plant and equipment in 1969, exceeding by 15 percent the record set in 1967 and equaled in 1968 (table 10). Investments by textile manufacturers are increasing around 21 percent to $0.9 billion. Railroad investments are up about 10 percent; however, the total in 1969 will be less than during 1965-67. Investments by other transportation companies also are expected to increase in 1969 but by a much smaller percentage than in recent years.

Table 10.--Investments in new plant and equipment by firms processing and transporting farm products, 1960-69

Year	Processing industries		Transportation	
	Food and beverage	Textile	Railroad	Other than rail
	Billion dollars			
1960	0.92	0.53	1.03	1.94
1961	.98	.50	.67	1.85
1962	.99	.61	.85	2.07
1963	.97	.64	1.10	1.92
1964	1.06	.76	1.41	2.38
1965	1.24	.98	1.73	2.81
1966	1.39	1.13	1.98	3.44
1967	1.41	.89	1.53	3.88
1968	1.41	.75	1.34	4.31
1969 1/	1.62	.91	1.47	4.52

1/ Estimates based on reports by business in late July and August 1969.
Data from Securities and Exchange Commission and Department of Commerce.

ADVERTISING EXPENDITURES BY CORPORATIONS MARKETING FOOD

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Total expenditures for advertising by corporate processors, wholesalers, retailers and eating and drinking places increased each year during 1950-68 based on data compiled by the Internal Revenue Service (IRS). In 1968, about $2.5 billion was spent for advertising compared with $591 million in 1950 (table 11). This excludes expenditures made by farmer cooperatives that qualify for an "exempt" status under section 521 of the IRS code of 1954, and by associations of agricultural producers.

In addition to the increase in expenditures, spending patterns have changed. Advertising expenditures have increased more for retail corporations (food stores and eating and drinking places) than for food processors and wholesalers.

Retail food store advertising expenditures increased from $74 million in 1950 to $677 million in 1968. Retailers' share rose from 12 percent of total expenditures by all corporate food marketing firms in 1950 to 27 percent in 1968.

Advertising expenditures by eating and drinking places increased from $16 million in 1950 to $127 million in 1968. Their share of the total increased from 3 to 5 percent.

Food processors increased advertising from $435 million in 1950 to $1,587 million in 1968. Expenditures increased every year except 1963. Over this period, processors' share declined from 74 percent to 63 percent.

Advertising expenditures by wholesalers increased from $65 million in 1950 to $112 million in 1968. Their share declined from 11 percent in 1950 to 5 percent in 1968.

In general, large corporate firms (assets of $50 million and over) marketing food products spend a larger percentage of their sales dollar for advertising than smaller firms. In 1966, large firms spent an average of 2.6 percent of each sales dollar on advertising while small firms only spent 0.8 percent (table 12). The average for all corporate firms was 1.4 percent.

Food retailers spent an average of 1.3 percent of their sales dollar for advertising. The large firms spent 1.5 percent while the small firms spent 1.2 percent.

Food manufacturers spent an average of 2.0 percent of the sales dollar for advertising. Large firms spent 3.5 percent while small firms spent 0.9 percent.

All food manufacturing industries except the confectionery products industry increased the percentage of sales spent for advertising between 1950 and 1966 (table 13). Meat, dairy, canned and frozen foods, bakery and sugar industries showed small increases. Grain mill and other food and kindred product industries showed large increases in the percentage of sales spent for advertising. Increased advertising by some industries may reflect an increase in the rate of introduction of new products. Available evidence suggests that the rate of new product introduction increased during this period. 1/ Advertising and other marketing costs are usually very high for new products as compared with expenditures on more mature products. When a product is new, a high level of advertising is needed to inform potential consumers of it and to induce trial use, and to encourage retailers to stock the product.

1/ Studies of Organization and Competition in Grocery Manufacturing. National Commission on Food Marketing, Technical Study No. 6, June 1966.

Table 11.--Advertising expenditures by corporations marketing food and kindred products, 1950-68

Year	Food processors	Grocery wholesalers	Food stores	Eating and drinking places	Total
	Million Dollars				
1950	435.1	64.8	74.2	16.5	590.6
1951	470.1	70.3	86.4	18.4	645.2
1952 (EST)	519.0	74.4	100.5	19.8	713.7
1953	558.4	78.5	114.6	21.3	772.8
1954	610.9	78.8	134.7	22.5	846.9
1955	688.3	75.3	171.8	27.8	963.2
1956	724.0	84.8	211.9	30.7	1051.4
1957	758.9	95.4	233.5	35.1	1122.9
1958	782.5	95.7	238.1	35.2	1151.6
1959	917.5	88.9	261.2	47.7	1315.3
1960	1011.6	82.4	303.8	48.9	1446.7
1961	1025.5	87.4	374.7	58.7	1546.3
1962	1116.7	87.9	466.6	69.0	1740.2
1963	1092.6	108.1	488.7	74.0	1763.4
1964	1215.5	88.7	519.9	100.4	1924.5
1965	1319.5	87.8	535.2	100.6	2043.1
1966	1388.2	101.0	629.6	111.0	2229.8
1967 (EST)	1461.5	104.6	638.6	117.9	2322.6
1968 (EST)	1587.1	111.8	677.0	127.0	2502.9
	Percent of Total				
1950	74	11	12	3	100
1951	73	11	13	3	100
1952 (EST)	73	10	14	3	100
1953	72	10	15	3	100
1954	72	9	16	3	100
1955	71	8	18	3	100
1956	69	8	20	3	100
1957	68	8	21	3	100
1958	68	8	21	3	100
1959	70	7	20	3	100
1960	70	6	21	3	100
1961	66	6	24	4	100
1962	64	5	27	4	100
1963	62	6	28	4	100
1964	63	5	27	5	100
1965	65	4	26	5	100
1966	62	5	28	5	100
1967 (EST)	63	5	27	5	100
1968 (EST)	63	5	27	5	100

Data compiled from Source Book of Statistics of Income, Internal Revenue Service.

Table 12.--Advertising expenditures of corporations marketing food and kindred products as a percentage of sales, by asset class. 1966

Marketing sector	Small corporations (assets under $50 million)	Large corporations (assets of $50 million and over)	All corporations
	Percent		
Manufacturing	.9	3.5	2.0
Meat products	.4	.8	.5
Dairy products	.7	2.6	1.6
Canned and frozen foods	1.3	4.1	2.4
Grain mill products	.8	5.7	3.3
Bakery products	1.6	3.0	2.2
Sugar	.5	.4	.4
Confectionery	1.2	7.3	2.1
Retailing	1.2	1.5	1.3
All food marketing	.8	2.6	1.4

Data compiled from Source Book of Statistics of Income, Internal Revenue Service.

Table 13.--Advertising expenditures by corporations manufacturing food and kindred products by industry, 1950-66

Year	Meat products	Dairy products	Grain mill products	Processed fruits, vegetables and sea foods	Bakery products	Sugar	Confectionery	Other food and kindred products	Food and kindred products 1/
	Million Dollars								
1950	51.5	54.3	75.6	57.1	56.9	2.5	34.2	60.8	69.2
1951	49.9	65.3	80.3	64.7	62.8	2.9	38.8	68.8	63.6
1952 2/									
1953	61.5	70.9	94.7	80.5	72.8	3.0	39.6	91.1	83.7
1954	72.7	80.3	102.1	91.3	75.4	2.9	42.5	101.6	88.0
1955	75.3	87.0	116.9	106.9	92.2	3.5	46.7	112.2	102.6
1956	86.5	91.5	109.5	110.9	101.0	3.9	48.3	121.4	104.8
1957	88.5	78.1	106.1	112.4	111.1	4.2	54.2	138.2	115.1
1958	72.1	124.3	137.3	128.9	111.4	5.1	60.7	82.4	119.9
1959	80.3	135.7	172.8	145.4	121.3	5.0	67.8	98.3	128.9
1960	88.2	140.7	191.3	147.2	117.8	7.5	73.3	111.8	133.8
1961	89.1	149.9	205.2	129.6	128.7	5.2	75.9	114.4	127.5
1962	98.0	152.9	245.6	142.1	129.6	5.0	74.6	124.9	131.5
1963	95.4	144.8	235.3	141.4	112.3	5.0	49.4	178.9	130.0
1964	109.4	166.9	263.7	155.6	132.9	4.7	47.7	228.4	106.2
1965	117.8	186.6	278.3	178.7	131.4	6.5	56.1	238.8	125.4
1966	123.3	192.6	302.5	183.2	123.3	8.4	69.3	261.5	124.1
	Percentage of Sales								
1950	0.4	1.5	1.7	1.8	2.1	0.2	2.6	3.0	5.8
1951	.4	1.6	1.6	2.1	2.2	.2	2.8	2.9	5.3
1952 2/									
1953	.5	1.7	1.9	2.4	2.3	.2	2.8	3.5	6.1
1954	.5	2.0	2.0	2.7	2.3	.2	2.9	3.5	6.2
1955	.6	2.0	2.3	2.7	2.5	.2	3.1	3.7	6.2
1956	.6	2.1	2.1	2.7	2.8	.3	3.3	3.7	6.3
1957	.6	1.9	2.0	2.7	2.8	.3	3.5	4.1	6.8
1958	.5	1.4	2.2	2.7	2.7	.3	3.7	4.2	6.9
1959	.5	1.5	2.6	2.7	3.0	.3	4.1	4.8	7.4
1960	.6	1.4	2.8	2.7	2.6	.4	4.1	5.3	8.3
1961	.5	1.6	2.9	2.5	2.7	.3	4.2	5.1	8.0
1962	.6	1.6	3.2	2.7	2.5	.3	4.2	4.9	8.0
1963	.6	1.5	3.0	2.8	2.4	.2	3.2	6.0	8.2
1964	.6	1.6	3.2	2.9	2.5	.2	2.8	5.7	5.9
1965	.6	1.8	3.3	2.8	2.5	.3	3.3	5.8	6.8
1966	.5	1.6	3.3	2.4	2.2	.4	2.1	5.9	6.9

Data compiled from Source Book of Statistics of Income, Internal Revenue Service.

1/ Not allocable.
2/ Data are not available.

REVISED PRICE SPREADS FOR BEEF AND PORK

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In recent years, several industry groups and the National Commission on Food Marketing have questioned the accuracy of price spreads for beef and pork, as published in this situation report. Their main question was whether weekend specials were fully considered in the computation of average retail prices. Computations included some of the effect of specials, but did not fully allow for the extra volumes sold at special prices.

As a result of a complete review of all procedures 1/, a considerable number of revisions have been made to more accurately compute price spreads for beef and pork. These include the effect of price specials, an adjustment for retail shrink, use of carlot wholesale prices, and changes in the computation of byproduct values. Some of these revisions tend to narrow the estimated spreads while others tend to widen them.

This article is in conjunction with publication of the revised series. The price spread series for both beef and pork have been revised back to 1949. The revised series, in their entirety, on a quarterly basis will be published in a bulletin in the near future.

REVISED PRICE SPREADS

Changes from one period to another in price spreads for both beef and pork are very similar in both the old and revised data. Differences are mainly in the absolute levels (tables 14 and 15). The revisions reflecting these absolute levels provide a greater degree of confidence in the series. Due to the absolute changes and the revision of the historical data, the revised series is essentially a replacement for, rather than a change in, the old series.

Beef

The revised 5-year average retail price for beef is 1.3 cents lower than the old estimate. The revised net farm value is 3.9 cents higher; the wholesale value remains almost the same. The total farm-retail spread is 5.2 cents lower--with decreases in both the farm-wholesale and wholesale-retail segments. The farmer's share of the retail price of beef is about 5 percentage points higher as a result of the decrease in the retail price and increase in the farm value. These differences are relatively large, especially the change in the farm value, farm-retail spread, and the farmer's share.

Most of the increase in the farm value is due to an allowance for retail shrink and a revised procedure for obtaining the farm price. Exclusion of retail shrink in the past resulted in an understatement in the quantity of live animal equivalent to 1 pound of beef sold at retail. The change in the revised procedure to the use of central market prices (minus marketing costs) for Choice steers allows for a more accurate estimate of the farm price. A decrease in the byproduct value also tended to increase the farm value.

Although the effect of specials was a major question originally, allowance for specials caused a relatively small decrease in the retail price and farm-retail spread. Most of the decrease in the farm-retail spread was caused by the increase in farm value.

Pork

The revised procedures resulted in relatively small increases in the retail price and the net farm value of pork. A

1/ An article concerning this review was published in the November 1967 issue of the Marketing and Transportation Situation.

Table 14.--Choice Beef: Old and revised prices, values, and spreads, annual 1964-68, monthly October 1968-September 1969

Year and month	Retail price		Wholesale value		Gross farm value		Byproduct value		Net farm value	
	Old	Revised	Old	Revised	Old	Revised	Old	Revised	Old	Revised
	Cents per pound									
1964	77.7	76.5	53.8	53.3	46.6	50.3	4.2	4.1	42.4	46.2
1965	81.4	80.1	57.6	58.0	51.6	56.5	4.8	4.7	46.8	51.8
1966	84.3	82.4	58.9	58.5	55.5	57.6	5.9	5.3	49.6	52.3
1967	84.1	82.6	59.7	59.4	54.3	57.0	5.0	4.0	49.3	53.0
1968	87.2	86.6	63.0	63.1	57.5	60.5	5.1	3.8	52.4	56.7
5-year average	82.9	81.6	58.6	58.5	53.1	56.4	5.0	4.4	48.1	52.0
Difference 1/	-1.3		-0.1		+3.3		-0.6		+3.9	
1968										
October	88.3	87.7	62.6	62.7	56.8	60.6	5.2	4.0	51.6	56.6
November	88.5	88.1	62.4	63.9	56.8	61.8	5.1	4.0	51.7	57.8
December	88.1	88.5	64.2	65.6	58.7	63.0	5.0	3.9	53.7	59.1
1969										
January	90.1	89.6	64.9	65.8	59.7	62.8	5.1	3.9	54.6	58.9
February	90.0	89.7	64.6	64.8	60.3	62.7	5.1	4.0	55.2	58.8
March	89.9	91.0	65.5	67.6	61.3	65.7	5.2	4.2	56.1	61.5
April	92.7	93.5	68.2	69.9	63.3	68.5	5.6	4.7	57.7	63.8
May	94.8	98.1	72.5	76.3	67.6	74.7	5.9	4.8	61.7	70.0
June	100.0	102.1	77.7	77.6	73.8	76.7	6.1	4.9	67.7	71.8
July	101.7	102.5	77.1	73.0	72.4	70.7	6.0	5.0	66.4	65.8
August	100.1	101.2	72.7	69.5	67.5	68.1	5.9	5.2	61.6	63.0
September	99.6	99.2	68.3	66.7	65.1	64.8	6.6	5.2	58.5	59.6

Year and month	Farm-wholesale spread		Wholesale-retail spread		Farm-retail spread		Farmer's share of retail price	
	Old	Revised	Old	Revised	Old	Revised	Old	Revised
	Cents per pound						Pct.	Pct.
1964	11.4	7.1	23.9	23.2	35.3	30.3	55	60
1965	10.8	6.2	23.8	22.1	34.6	28.3	57	65
1966	9.3	6.2	25.4	23.9	34.7	30.1	59	63
1967	10.4	6.4	24.4	23.2	34.8	29.6	59	64
1968	10.6	6.4	24.2	23.5	34.8	29.9	60	65
5-year average	10.5	6.5	24.3	23.1	34.8	29.6	58	63
Difference 1/	-4.0		-1.2		-5.2		+5	
1968								
October	11.0	6.1	25.7	25.0	36.7	31.1	58	65
November	10.7	6.1	26.1	24.2	36.8	30.3	58	66
December	10.5	6.5	23.9	22.9	34.4	29.4	61	67
1969								
January	10.3	6.9	25.2	23.8	35.5	30.7	61	66
February	9.4	6.0	25.4	24.9	34.8	30.9	61	66
March	9.4	6.1	24.4	23.4	33.8	29.5	62	68
April	10.5	6.1	24.5	23.6	35.0	29.7	62	68
May	10.8	6.3	22.3	21.8	33.1	28.1	65	71
June	10.0	5.8	22.3	24.5	32.3	30.3	68	70
July	10.7	7.2	24.6	29.5	35.3	36.7	65	64
August	11.1	6.5	27.4	31.7	38.5	38.2	62	62
September	9.8	7.1	31.3	32.5	41.1	39.6	59	60

1/ The difference is the change from the old to the revised.

Table 15.--Pork: Old and revised prices, values, and spreads, annual 1964-68, monthly October 1968-September 1969

Year and month	Retail price		Wholesale value		Gross farm value		Byproduct value		Net farm value	
	Old	Revised	Old	Revised	Old	Revised	Old	Revised	Old	Revised
	Cents per pound									
1964	56.3	55.9	40.0	42.2	30.7	29.3	4.0	2.5	26.7	26.8
1965	64.1	65.8	49.5	52.6	42.1	41.6	5.5	3.5	36.6	38.1
1966	73.4	74.0	54.8	57.9	47.6	45.9	6.4	3.7	41.2	42.2
1967	67.0	67.2	48.1	51.5	39.0	37.3	4.8	2.5	34.2	34.8
1968	67.0	67.4	48.4	51.7	38.3	36.7	4.3	2.2	34.0	34.5
5-year average	65.6	66.1	48.2	51.2	39.5	38.2	5.0	2.9	34.5	35.3
Difference 1/	+0.5		+3.0		-1.3		-2.1		+0.8	
1968										
October	68.4	67.8	49.1	50.4	39.1	34.7	4.3	2.1	34.8	32.6
November	67.0	67.1	46.7	50.3	35.8	33.9	4.0	2.1	31.8	31.8
December	67.0	67.0	47.6	52.1	34.9	35.6	3.8	2.1	31.1	33.5
1969										
January	67.5	67.9	49.5	52.9	37.8	37.4	4.1	2.4	33.7	35.0
February	67.8	68.6	49.4	52.5	39.6	38.7	4.5	2.7	35.1	36.0
March	67.8	68.9	49.7	52.9	39.8	39.2	4.6	2.8	35.2	36.4
April	68.0	69.1	50.4	53.1	40.2	38.6	4.5	2.7	35.7	35.9
May	69.0	71.6	49.7	56.5	41.9	44.0	5.2	3.0	36.7	41.0
June	72.7	75.0	55.9	59.8	49.6	48.0	5.5	3.2	44.1	44.8
July	74.1	76.7	56.6	60.5	50.4	49.8	5.9	3.4	44.5	46.4
August	75.0	78.2	59.7	63.1	53.1	51.5	6.1	3.7	47.0	47.8
September	77.3	77.9	59.9	62.6	51.4	49.6	6.0	3.5	45.4	46.1

Year and month	Farm-wholesale spread		Wholesale-retail spread		Farm-retail spread		Farmer's share of retail price	
	Old	Revised	Old	Revised	Old	Revised	Old	Revised
	Cents per pound						Pct.	Pct.
1964	13.3	15.4	16.3	13.7	29.6	29.1	47	48
1965	12.9	14.5	14.6	13.2	27.5	27.7	57	58
1966	13.6	15.7	18.6	16.1	32.2	31.8	56	57
1967	13.9	16.7	18.9	15.7	32.8	32.4	51	52
1968	14.4	17.2	18.6	15.7	33.0	32.9	51	51
5-year average	13.7	15.9	17.4	14.9	31.1	30.8	53	53
Difference 1/	+2.2		-2.5		-0.3		0	
1968								
October	14.3	17.8	19.3	17.4	33.6	35.2	51	48
November	14.9	18.5	20.3	16.8	35.2	35.3	47	47
December	16.5	18.6	19.4	14.9	35.9	33.5	46	50
1969								
January	15.8	17.9	18.0	15.0	33.8	32.9	50	52
February	14.3	16.5	18.4	16.1	32.7	32.6	52	52
March	14.5	16.5	18.1	16.0	32.6	32.5	52	53
April	14.7	17.2	17.6	16.0	32.3	33.2	52	52
May	13.0	15.5	19.3	15.1	32.3	30.6	53	57
June	11.8	15.0	16.8	15.2	28.6	30.2	61	60
July	12.1	14.1	17.5	16.2	29.6	30.3	60	60
August	12.7	15.3	15.3	15.1	28.0	30.4	63	61
September	14.5	16.5	17.4	15.3	31.9	31.8	59	59

1/ The difference is the change from the old to the revised.

rise of 3 cents in the wholesale price, however, increased the farm-wholesale spread and decreased the wholesale-retail spread. The total farm-retail spread decreased slightly (0.3 cent). Both the old and the revised average farmer's share for the 5-year period round to 53 percent.

Revision did not change the farmer's share of the retail pork price appreciably because some of the changes tended to be offsetting. Changes in byproduct value calculations and inclusion of retail shrink tended to raise the farmer's share; a change in the conversion factor due to the improvement in hog quality and changes in the farm and retail price estimating procedures tended to lower the farmer's share.

The increase in the wholesale value of pork came from a transportation differential added to the Chicago wholesale price to make it representative of the United States, an allowance for retail shrink, and a revision in the carcass-to-retail cutout percentage. The previous procedure assumed no cutout loss and did not adjust Chicago prices.

Differences between the old and revised estimates for a particular month (for both beef and pork) sometimes vary a cent or two from the average difference. Part of this, especially when prices are changing rapidly, results from using a monthly average rather than a short period early in the month.

REVISED PROCEDURES FOR COMPUTING PRICE SPREADS

Since price spreads are the difference between prices or values at 2 market levels, the basic task in computing price spreads is estimating these prices and values at each market level--retail, wholesale, and farm. Because of extensive revisions, changes in the procedures are outlined in the remainder of this article. Changes are discussed under headings for the three market levels. Changes that affect more than one level are discussed in detail under the first level to which they are applicable.

Certain principles are involved in accurately estimating prices and values, and changes were made to more nearly attain these principles.

Composite retail prices should include:

1. A geographically representative sample of prices of all retail cuts for the time period involved.

2. An accurate procedure for weighting these prices to reflect the volume sold at regular and special prices to obtain the composite price.

Composite wholesale values should include:

1. Prices of carcasses that are of comparable quality to the cuts priced at retail.

2. Prices representative of the areas where the meat is consumed for the time period involved.

3. Correct weighting of these prices by volume of movement in relation to area where consumed, terms of sale, and volume discounts.

4. Conversion of the carcass price to the wholesale value of the equivalent of 1 pound sold at retail.

Net farm values should include:

1. Prices of live animals of comparable quality to cuts priced at retail.

2. Prices representative of production areas for the time period involved.

3. Deduction of costs to the producer for transportation and other selling expenses.

4. Weighting of net returns to producers by volume of movement by area.

5. Conversion of live animal prices to the farm value of the equivalent of 1 pound sold at retail.

6. Adjustment of the farm value to allow for the value of byproducts.

Retail Price

Data Collection Period

Estimates are made for each month and thus an average price for the month is required to reflect the time period. Retail price procedures in the old method used only Bureau of Labor Statistics (BLS) prices collected on the first Tuesday, Wednesday, and Thursday of the month. For consistency, data used for the farm and wholesale levels also were for the first week of each month. The new procedure uses average prices for the entire month at all levels. Monthly data are readily available at the farm and wholesale levels. To obtain average retail prices for the month, meat prices reported each week to the Marketing Economics Division (MED) by retail food chains are utilized along with BLS prices. MED presently receives weekly prices from 40 retail chain divisions throughout the United States. Regular and special prices are obtained weekly from each chain division. Beef prices used are for Choice grade.

In revising retail prices over the historical period, the retail price could not be converted to a monthly basis before 1962, since the MED survey was not conducted in its present form before that time. The series before 1962 were constructed using data for the BLS pricing week with the exception of the farm price of beef. Price series used for live cattle were only available on a monthly basis.

BLS Price Adjustment

To use BLS prices of individual cuts in the revised procedure, prices of each cut must be converted into a monthly average regular and specials-included price. The regular price represents an average of all regular prices for the cut assuming no specials. The specials-included price represents an average of special prices for stores where the cut is on special and regular prices for those stores where the cut is not on special. The BLS prices are adjusted by using the MED retail survey data for each cut. The difference between the regular and specials-included price for the cut is determined from the retail price survey for the week BLS prices are collected. One-third of this difference is subtracted from the BLS published price to obtain the specials-included price and two-thirds of the difference is added to obtain the regular price of the cut. These adjustments are based on data provided by BLS indicating that BLS prices reflect about two-thirds of the specials. These two prices are then adjusted to a monthly average by using the difference in the MED retail survey prices for the week BLS prices are collected and the average for the month.

Prices and Specials

From the weekly chainstore prices, MED computes average monthly prices for 29 beef cuts and 20 pork cuts. Adjusted BLS prices are used in place of MED retail survey prices, however, for those cuts for which BLS prices are available. In the past, only the cuts priced by BLS were used in estimating the composite retail prices of beef and pork. This assumed that prices of cuts not priced by BLS varied proportionately with cuts priced by BLS. The revised procedure uses prices of all retail cuts to obtain composites--prices for all cuts combined.

As both regular and specials-included prices for all cuts are available, a basis is provided for computing the total effect of specials on the composite price. Two composite prices are computed; one composite of all regular prices, the second of specials-included prices. The differences between the regular composite and specials-included composite is the price effect of specials--i.e., the change in the average price of beef or pork due to specials <u>without</u> an allowance for changes in the relative quantities of the cuts sold due to the specials.

The change in the volume of movement when an item is on special also has to be taken into account to obtain the total effect of specials. Since it is not practical to collect volume of movement data every month to compute a weighted average composite price, a special study was conducted with 20 retail chain divisions in 5 cities over a period of 6 months. This

study determined the relationship of the volume effect to the price effect. From the data collected, a regular composite, a specials-included composite, and a volume-weighted composite price were computed. The difference between specials-included and volume-weighted composite prices is the volume effect of specials--i.e., the change in the average price of beef or pork sold due to the changes in the proportions of cuts sold when some are specialed. The data indicated that the volume effect is 0.65 times as large as the price effect for beef. Similarly, the volume effect is 0.52 times as large as the price effect for pork. 2/

In the revised procedures, the total effect of specials is estimated by first computing the regular and specials-included composite prices using the MED retail survey and BLS data. Subtraction of the specials-included composite from the regular composite provides the price effect. The price effect for beef is then multiplied by 0.65 and the price effect of pork by 0.52 to obtain the volume-effects. The price and volume effects are then added together and subtracted from the regular composite price to obtain the weighted composite U.S. retail price.

Procedures used in computing retail prices for the historical period were identical to the revised procedures going back through 1964. In 1962 and 1963, only 5 instead of 7 beef cuts and 4 instead of 6 pork cuts were priced by BLS. Prices for the two missing cuts were estimated by applying the difference between the adjusted BLS price and the retail survey price in 1964 and 1965 to the 1962 and 1963 retail-survey prices. Retail survey data were not available prior to 1962. The revised series prior to 1962 was estimated using the relationship between the previous and revised retail prices in 1962.

Wholesale Value

Monthly average prices are used in the revised procedure to adequately reflect the time period involved. The procedures for determining the wholesale prices and values for beef and pork vary. Pork carcasses are usually broken down and in many cases smoked or cured before being placed on the wholesale market. Beef is usually sold in carcass form.

Beef Prices

Trends in wholesale prices for beef are often different between the West Coast and other U.S. markets. Therefore, these areas are used as separate markets in the revised procedures. The U.S. composite wholesale price is obtained by weighting the West Coast price by 13.4 percent and the rest of the United States by 86.6 percent. These weights are the relative beef consumption levels of the 2 areas based on the 1965 Household Food Consumption Survey data and population data.

Chicago carlot prices of 600-700 pound Choice steer carcasses are used to represent all U.S. markets, except the West Coast, as beef is normally sold on a plus or minus Chicago price basis. This was substantiated by comparing transportation rates and price differences between several markets. Carlot prices, as opposed to less-than-carlot prices, are used since more than 80 percent of the beef is sold by carlot. The Chicago price is adjusted to represent the entire area by adding a transportation differential of 75 cents per hundredweight. This differential was determined by comparing price differences between Chicago and other markets and weighting the price differentials by consumption in each State in the area.

The wholesale price for the West Coast market is computed from an average of carlot and less-than-carlot prices of 600-700 pound Choice steer carcasses at Los Angeles, San Francisco, and Seattle-Portland. This allows for price differences in the area and also the relative movement by carlot and less-than-carlot sales.

2/ For greater detail, see Duewer, Lawrence A., "Effects of Specials on Composite Meat Prices," Agricultural Economics Research, Vol. 21, No. 3, July 1969.

Carlot prices were not available for the West Coast markets before 1964 and for Chicago before 1960 to compute the historical series. A gradual change was made to less-than-carlot data.

Pork Prices

The composite wholesale price of pork is computed by weighting the prices of various pork cuts, as in the past. However, pigs feet, ears, and tails are now included as minor products, rather than being classed as byproducts. Weights of the individual cuts were also changed to reflect the improvement in hog quality. Prices used for all cuts are Chicago carlot prices. Since pork production is small on the West Coast, prices used throughout the United States are plus or minus prices published in the National Provisioner. A transportation differential of 88 cents per hundredweight is added to the weighted wholesale price to make it representative of the United States. Transportation rates, 1965 Household Food Consumption Survey data, and population data were used to obtain the 88 cent differential.

Wholesale values for the historical period were computed using the revised procedure. Less-than-carlot prices were substituted when carlot prices were not available in earlier years.

Wholesale and Farm Product Equivalents

To obtain meaningful spread estimates, values must be determined for the quantities of farm product (live animal) and wholesale product (carcass beef or wholesale pork cuts) that are equivalent to 1 pound of retail product sold. Changes in these quantities or conversion factors resulted from the inclusion of retail shrink and changes in dressing percentages and cutting tests. Conversion factors for beef and pork differ.

Retail shrink is the difference between the potential retail value of meat at the time it is cut and packaged and the actual value received for the meat by the store. Included in retail shrink are losses in value resulting from spoilage, pilferage, refacing, conversion to lower valued uses, and extra weight placed in the package to allow for dehydration. Allowance was not made for these losses in the past. A retail shrink loss of 5 percent for beef and 5.5 percent for pork is allowed in the revised procedure. The loss itself occurs at the retail level but does not affect the computation of the composite retail price, since retailers price meat allowing for this loss. More pounds of carcass and live animal are needed to produce the 1 pound of meat priced at retail. Thus, the allowance for retail shrink is reflected in the farm and wholesale conversion factors.

Beef: In the past, a conversion factor of 1.35 was used to compute the wholesale value of beef equivalent to 1 pound sold at retail. The conversion factor of 2.25 was used to compute the farm value. The wholesale conversion factor (1.35) was based on a 74 percent carcass-to-retail cutout estimate. The farm conversion factor (2.25) combined this cutout percentage with an estimated live-to-carcass dressing percentage of 60.

Conversion factors for beef in the revised procedure are 1.41 at the wholesale level and 2.28 at the farm level. These new conversion factors reflect the allowance for retail shrink by raising the conversion factors, since more product is required at the wholesale and farm levels to obtain a pound of meat at retail. However, a revision of cutout and dressing percentages tended to lower the conversion factors. The revised carcass-to-retail cutout is 74.6 percent and the live-to-carcass dressing percentage is 62 percent. These new values are the result of using only prices of Choice steers, rather than prices of both steers and heifers. Steers yield more beef per 100 pounds of live animal and 100 pounds of carcass and sell for higher farm and wholesale prices than heifers. As these factors tend to balance out, data for steers only are used to facilitate computations. At the retail level there is no differentiation between heifer and steer beef.

In the revision of beef data for the historical period, conversion factors were changed gradually between 1951 and 1962 to reflect changes that occurred in carcass-to-retail cutout during this period. Retailers trimmed more fat each year and boned more cuts. The farm conversion factor was increased gradually from 2.12 prior to 1952 to 2.28 in 1962 and later. Correspondingly, the wholesale conversion factor was changed from 1.32 to 1.41.

Pork: It was assumed previously that no loss occurred between wholesale and retail for pork. Therefore, the wholesale conversion factor was 1.00. The farm conversion factor was 2.00; based on an estimated yield of 50 pounds of retail cuts from 100 pounds of live hog.

In the revised procedure, conversion factors of 1.07 at the wholesale level and 1.97 at the farm level are used. The retail shrink allowance of 5.5 percent raised the conversion factors; but other changes were made as a result of the improvement in hog quality over the years that reduced the conversion factor at the farm level. Consumers prefer leaner pork and producers have gradually responded by producing a leaner hog that yields more meat and less lard. The revised farm conversion factor is based on an estimated yield of 54.3 pounds of major and minor cuts per 100 pounds live hog. A carcass-to-retail cutout yield of 98.7 percent is also included. The new carcass-to-retail yield, combined with the allowance for retail shrink, changed the conversion factor at wholesale to 1.07.

In revising the pork historical series, the wholesale conversion factor remained 1.07, but the farm conversion factor was changed gradually to allow for the improvement in hog quality. Starting in the first half of 1949 with the yield of 50.3 pounds of pork per 100 pounds of live hog as a base, 0.1 pound of pork was added and 0.1 pound of lard subtracted each 6 months to reflect a leaner hog. The farm conversion factor decreased from 2.13 in 1949 to 1.97 in 1969.

Farm Value

Changes in procedures for estimating the farm value not yet discussed include the determination of the net price the farmer receives and the change in use of byproducts. In the past, computations of the farm value for both beef and pork were based on the "Prices Received by Farmers" series published by the Statistical Reporting Service (SRS). Adjustments had to be made in the SRS price series to estimate prices of the same quality of product used at the wholesale and retail levels.

Beef Farm Values

Live cattle prices are now based on prices at 7 Midwestern markets and a composite California price. Marketing costs of the producer are subtracted to arrive at a "farm-gate" value. These prices are specifically for Choice steers. The 7 markets are Chicago, Omaha, Sioux City, Kansas City, National Stockyards, South St. Joseph and Sioux Falls. The California price is published in the Market News and represents an average of California quotations. The weighted 7-market price is reduced by 60 cents per hundredweight to cover farmer marketing costs. These costs were obtained from data provided by the livestock exchanges at the markets involved. A value of 50 cents per hundredweight is subtracted from the California price to reflect farmer marketing costs. A weight of 15 percent is given to the West Coast price and 85 percent to the 7-market price in computing the U.S. average price. These weights are based on relative production levels. The gross farm value is obtained by multiplying the weighted average U.S. price of Choice steers by the revised farm conversion factor of 2.28.

The hide and offal value published in Market News is now used as the basis for computing beef byproduct values. Changes in byproduct use had resulted in an overstatement of the byproduct value.

In obtaining the ratio of byproducts to the total value of products obtained from the animal, carlot rather than less-than-carlot carcass prices for Chicago are now used. The gross farm value is multiplied by the byproduct ratio to get the byproduct allowance, that is, the portion of the gross farm value attributed to the byproducts. Subtraction of the byproduct allowance from the gross farm value provides the net farm value.

Computations of the historical farm values for beef were made with data for only 6 of 7 markets for 1955 through 1958 and 3 markets prior to 1955. Prior to November 1965, an average of the Stockton and El Centro markets was used to estimate the California price. Prior to September 1956, when El Centro data were not available, an adjusted Stockton price was used alone. Due to the change in cattle grades and unavailability of data, the price was estimated before 1952 by multiplying the old price series by 105.25. This was the average relationship between the previous and revised prices during the 1952-57 period. The hide and offal value now used as a base in the calculation of the byproduct value was not reported until July 1966. A gradual adjustment over a 9-year period was made back to the old hide and offal value.

Pork Farm Values

Average monthly prices of barrows and gilts at 8 primary markets are used in the revised procedure for computing the farm price of pork. Although not dispersed throughout the United States, these markets are located in the major areas of hog production. A farmer marketing cost of 78 cents per hundredweight is subtracted to arrive at a farm-gate value. This charge includes 29 cents for transportation and 49 cents for yardage, commission, and other marketing costs. Data for marketing costs were obtained from the livestock exchanges. The gross farm value is obtained by multiplying the farm price by the conversion factor of 1.97 discussed earlier.

Byproduct items and weights for pork have been changed to reflect the present yield of lard which has decreased significantly. The byproduct value is subtracted from the gross farm value to obtain the net farm value. The value of byproducts was greater during earlier years of the historical period mainly due to the higher yield of lard.

SELECTED NEW PUBLICATIONS

1. "Commercial Floriculture and Related Products: An Analysis of Purchases and Buyers of Goods and Services, Marketing Year Ended May 1967." Statistical Supplement to Marketing Research Report No. 855, by Richard Hall and Stephen M. Raleigh, Jr., U.S. Dept. of Agr., Econ. Res. Ser., Oct. 1969.

2. "Developments in Marketing Spreads for Agricultural Products in 1968." U.S. Dept. of Agr., Econ. Res. Ser., ERS-14 (1969). (Reprinted from Hearings before the Subcommittee of the Committee of Appropriations, United States House of Representatives, Ninety-First Congress, First Session). Sept. 1969.

3. "Marketing Woody Ornamentals: Practices and Trends of Nurseries in North Carolina" by Stephen M. Raleigh, Jr. and Jules V. Powell, U.S. Dept. of Agr., Econ. Res. Ser., ERS-420, Sept. 1969.

4. "Processing, Storage, and Selected Storage Service Costs for Burley Tobacco in Commercial Facilities, 1966/67 and Estimated 1968," by N.A. Wynn, Jr., Donn A. Reimund, and J. W. H. Brown, U.S. Dept. Agr., Econ. Res. Ser., ERS-412, June 1969.

5. "Processing, Storage, and Selected Storage Service Costs for Fire-cured, Types 22 and 23, and Dark Air-cured, Types 35 and 36, Tobaccos in Commercial Facilities, 1966/67 and Estimated 1968," by N. A. Wynn, U.S. Dept. Agr., Econ. Res. Ser., ERS-414, July 1969.

6. "Spatial and Temporal Aspects of the Demand for Food in the United States-Fluid Milk," by Robert Raunikar, Joseph C. Purcell and J.C. Elrod, Ga. Agr. Expt. Sta., Res. Bull. 51, June 1969. University of Georgia, Experiment, Ga.

> Unless otherwise indicated, items listed are Economic Research Service publications and single copies may be obtained free from the Division of Information, Office of Management Services, U.S. Department of Agriculture, Washington, D. C. 20250.
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> Publications issued by State Agricultural Experiment Stations may be obtained from the issuing Station.

Table 16.--Farm food products: Retail cost, farm value of equivalent quantities sold by producers, byproduct allowance, farm-retail spread, and farmer's share of retail cost, July-September 1969

Product 1/	Farm equivalent	Retail unit	Retail cost	Gross farm value	Byproduct allowance	Net farm value 2/	Farm-retail spread	Farmer's share
			Dollars	Dollars	Dollars	Dollars	Dollars	Percent
Market basket	Farm produce equivalent to products bought per urban wage-earner and clerical-worker household in 1960-61	Average quantities purchased per urban wage-earner and clerical-worker household in 1960-61	1194.08	—	—	491.65	702.43	41
Meat products			371.79	—	—	217.03	154.76	58
Dairy products			209.03	—	—	101.03	108.00	48
Poultry and eggs			96.34	—	—	56.07	40.27	58
Bakery and cereal products 3/								
All ingredients			172.95	—	—	33.21	139.74	19
Grain			—	29.25	4.86	24.39	—	14
All fruits and vegetables			254.92	—	—	65.37	189.55	26
Fresh fruits and vegetables			129.63	—	—	38.37	91.26	30
Fresh fruits			55.02	—	—	15.39	39.63	28
Fresh vegetables			74.61	—	—	22.98	51.63	31
Processed fruits and vegetables			125.29	—	—	27.00	98.29	22
Fats and oils			37.78	26.83	17.15	9.68	28.10	26
Miscellaneous products			51.27	—	—	9.26	42.01	18
			Cents	Cents	Cents	Cents	Cents	Percent
Beef, Choice grade 4/	2.28 lb. Choice grade cattle	Pound	101.0	67.9	5.1	62.8	38.2	62
Lamb, Choice grade 5/	2.47 lb. lamb	Pound	104.7	67.6	6.9	60.7	44.0	58
Pork 4/	1.97 lb. hogs	Pound	77.6	50.3	3.5	46.8	30.8	60
Butter	Cream and whole milk	Pound	84.5	101.4	38.8	62.6	21.9	74
Cheese, American process	Milk for American cheese	½ pound	47.5	21.9	.8	21.1	26.4	44
Ice cream	Cream, milk, and sugar	½ gallon	81.2	—	—	27.6	53.6	34
Milk, evaporated	Milk for evaporating	14½-ounce can	17.7	8.8	.2	8.6	9.1	49
Milk, fresh								
Home delivered	4.39 lb. Class I milk	½ gallon	62.5	—	—	27.6	34.9	44
Sold in stores	4.39 lb. Class I milk	½ gallon	55.3	—	—	27.6	27.7	50
Chickens, frying, ready-to-cook	1.37 lb. broiler	Pound	44.5	—	—	22.6	21.9	51
Eggs, Grade A large	1.03 dozen	Dozen	59.8	—	—	40.2	19.6	67
Bread, white								
All ingredients	Wheat and other ingredients	Pound	23.0	—	—	3.3	19.7	14
Wheat	.877 lb. wheat	Pound	—	2.8	.3	2.5	—	11
Bread, whole or cracked wheat	.708 lb. wheat	Pound	31.5	—	—	3.2	28.3	10
Cookies, cream filled	.528 lb. wheat	Pound	50.1	—	—	4.4	45.7	9
Corn flakes	2.87 lb. yellow corn	12 ounces	31.4	5/6.1	5/3.4	5/2.7	28.7	9
Flour, white	6.8 lb. wheat	5 pounds	58.0	22.2	2.5	19.7	38.3	34
Apples	1.04 lb. apples	Pound	27.4	—	—	7.4	20.0	27
Grapefruit	1.03 grapefruit	Each	18.2	—	—	5.6	12.6	31
Lemons	1.04 lb. lemons	Pound	30.1	—	—	11.1	19.0	37
Oranges	1.03 doz. oranges	Dozen	85.4	—	—	17.9	67.5	21
Cabbage	1.08 lb. cabbage	Pound	11.4	—	—	3.5	7.9	31
Carrots	1.03 lb. carrots	Pound	19.2	—	—	7.8	11.4	41
Celery	1.08 lb. celery	Pound	19.9	—	—	6.7	13.2	34
Cucumbers	1.09 lb. cucumbers	Pound	22.2	—	—	7.6	14.6	34
Lettuce	1.88 lb. lettuce	Head	27.4	—	—	8.3	19.1	30
Onions	1.06 lb. onions	Pound	14.7	—	—	4.7	10.0	32
Peppers, green	1.09 lb. peppers	Pound	37.1	—	—	11.9	25.2	32
Potatoes	10.42 lb. potatoes	10 pounds	88.0	—	—	24.2	63.8	28
Tomatoes	1.18 lb. tomatoes	Pound	35.7	—	—	11.1	24.6	31
Peaches, canned	1.60 lb. Calif. cling peaches	No. 2½ can	34.6	—	—	6.1	28.5	18
Pears, canned	1.85 lb. pears for canning	No. 2½ can	50.2	—	—	9.5	40.7	19
Beets, canned	1.24 lb. beets for canning	No. 303 can	18.2	—	—	1.3	16.9	7
Corn, canned	2.495 lb. sweet corn	No. 303 can	23.8	—	—	3.0	20.8	13
Peas, canned	.69 lb. peas for canning	No. 303 can	25.0	—	—	3.7	21.3	15
Tomatoes, canned	1.84 lb. tomatoes for canning	No. 303 can	19.7	—	—	3.6	16.1	18
Orange juice, concentrate, frozen	3.75 lb. oranges	6-ounce can	24.4	—	—	11.3	13.1	46
French fried potatoes, frozen	1.38 lb. potatoes	9 ounces	16.3	—	—	3.3	13.0	20
Peas, frozen	.70 lb. peas for freezing	10 ounces	21.0	—	—	3.6	17.4	17
Beans, navy	1.00 lb. Mich. dry beans	Pound	19.6	—	—	7.1	12.5	36
Margarine	Soybeans, cottonseed, and milk	Pound	27.7	19.2	12.5	6.7	21.0	24
Peanut butter	1.33 lb. peanuts	12-ounce jar	45.9	—	—	15.9	30.0	35
Salad and cooking oil	Soybeans, cottonseed, and corn	24-ounce bottle	52.2	43.9	33.0	10.9	41.3	21
Vegetable shortening	Soybeans and cottonseed	3 pounds	82.0	67.8	44.5	23.3	58.7	28
Sugar	Sugar beets and cane	5 pounds	62.6	27.2	1.6	6/25.6	6/37.0	6/41
Spaghetti with sauce, canned	Wheat, tomatoes, cheese, sugar	15½-ounce can	17.5	—	—	2.1	15.4	12

1/ Product groups include more items than those listed in this table. For example, in addition to the products listed--Choice beef, lamb, and pork (major products except lard)--the meat products group includes lower grades of beef, the minor edible pork products, and veal.
2/ Gross farm value adjusted to exclude imputed values of by-products obtained in processing.
3/ For the bakery products group and the individual wheat products, gross farm value, by-product allowance, net farm value, and farmer's share are based on the market price of wheat received by farmers plus the cost of the marketing certificate to millers. This cost is returned to farmers complying with the Wheat Program.
4/ Data for beef and pork have been extensively revised, for discussion of the revision see article in this issue, "Revised Price Spreads for Beef and Pork."
5/ Farm product equivalents for lamb have been revised to allow for loss through pilferage, spoilage, dehydration and refacing and economic losses incurred through selling cuts in a lower-priced form or at special low prices because of quality deterioration.

Table 17.--Farm food products: Retail cost and farm value, July-September 1969, April-June 1969, July-September 1968, and 1957-59 average

Product 1/	Retail unit	Retail cost: July-September 1969	Retail cost: April-June 1969	Retail cost: July-September 1968 3/	Retail cost: 1957-59 average	Retail cost: Percentage change July-Sept. 1969 from- April-June 1969	Retail cost: Percentage change July-Sept. 1969 from- July-Sept. 1968	Net farm value 2/: July-September 1969	Net farm value 2/: April-June 1969	Net farm value 2/: July-September 1968 3/	Net farm value 2/: 1957-59 average	Net farm value 2/: Percentage change July-Sept. 1969 from- April-June 1969	Net farm value 2/: Percentage change July-Sept. 1969 from- July-Sept. 1968
		Dollars	Dollars	Dollars	Dollars	Percent	Percent	Dollars	Dollars	Dollars	Dollars	Percent	Percent
Market basket	Average quantities purchased per urban wage-earner and clerical-worker household in 1960-61	1,194.08	3/1,161.33	1,128.32	982.65	2.8	5.8	491.65	3/477.13	444.17	387.87	3.0	10.7
Meat products		371.79	349.90	327.71	285.05	6.3	13.5	217.03	204.18	181.00	154.47	6.3	19.9
Dairy products		209.03	206.63	203.19	173.33	1.2	2.9	101.03	100.20	97.25	77.85	.8	3.9
Poultry and eggs		96.34	89.97	88.42	93.02	7.1	9.0	56.07	49.43	49.87	56.28	13.4	12.4
Bakery and cereal products 4/													
All ingredients		172.95	172.13	169.93	148.40	.5	1.8	33.21	33.85	32.22	30.25	-1.9	3.1
Grain		---	---	---	---			24.39	25.03	24.60	23.40	-2.6	-.9
All fruits and vegetables		254.92	3/254.02	254.15	202.96	.4	.3	65.37	3/69.96	65.67	50.05	-6.6	-.5
Fresh fruits and vegetables		129.63	3/129.06	128.35	91.15	.4	1.0	38.37	3/42.57	40.33	28.70	-9.9	-4.9
Fresh fruits		55.02	3/51.78	58.00	36.26	6.3	-5.1	15.39	3/17.22	19.04	12.26	-10.6	-19.2
Fresh vegetables		74.61	77.28	70.34	54.89	-3.5	6.1	22.98	25.35	21.28	16.44	-9.3	8.0
Processed fruits and vegetables		125.29	124.95	123.80	111.81	.3	1.2	27.00	27.39	25.35	21.35	-1.4	6.5
Fats and oils		37.78	37.84	37.72	37.56	-.2	.2	9.68	10.17	9.26	11.19	-4.8	4.5
Miscellaneous products		51.27	50.85	49.20	42.33	.8	4.2	9.26	9.34	8.90	7.48	-.9	4.0
		Cents	Cents	Cents	Cents	Percent	Percent	Cents	Cents	Cents	Cents	Percent	Percent
Beef, Choice grade 5/	Pound	101.0	3/97.9	87.5	78.1	3.2	15.4	62.8	3/68.5	57.7	48.3	-8.3	8.8
Lamb, Choice grade	Pound	104.7	100.8	94.6	70.0	3.9	10.7	60.7	3/60.0	53.9	40.2	1.2	12.6
Pork 5/	Pound	77.6	3/71.9	69.1	60.5	7.9	12.3	46.8	3/40.6	36.8	31.0	15.3	27.2
Butter	Pound	84.5	84.3	83.5	73.2	.2	1.2	62.6	62.1	60.7	52.6	.8	3.1
Cheese, American process	½ pound	47.5	46.6	44.8	32.3	1.9	6.0	21.1	20.9	19.5	14.2	1.0	.8
Ice cream	½ gallon	81.2	80.5	80.7	84.2	.9	.6	27.6	27.4	26.3	21.0	.7	4.9
Milk, evaporated	14½-ounce can	17.7	17.6	17.3	14.5	.6	2.3	8.6	8.7	8.2	6.2	-1.1	4.9
Milk, fresh													
Home delivered	½ gallon	62.5	61.7	60.5	50.8	1.3	3.3	27.6	27.4	26.9	21.9	.7	2.6
Sold in stores	½ gallon	55.3	54.6	54.1	46.6	1.3	2.2	27.6	27.4	26.9	21.9	.7	2.6
Chickens, frying, ready-to-cook	Pound	44.5	41.9	40.7	43.5	6.2	9.3	22.6	20.4	20.2	24.4	10.8	11.9
Eggs, Grade A large	Dozen	59.8	55.3	55.0	56.2	8.1	8.7	40.2	34.4	35.3	36.1	16.9	13.9
Bread, white													
All ingredients	Pound	23.0	22.9	22.5	18.9	.4	2.2	3.3	3.3	3.2	3.0	0	3.1
Wheat	Pound	--	--	--	--	--	--	2.5	2.5	2.5	2.4	0	0
Bread, whole or cracked wheat	Pound	31.5	31.2	30.2	--	1.0	4.3	3.2	3.2	3.1	--	0	3.2
Cookies, cream filled	Pound	50.1	50.0	51.0	--	.2	-1.8	4.4	4.5	4.3	--	-2.2	2.3
Corn flakes	12 ounces	31.4	31.1	31.2	24.5	1.0	.6	2.7	2.7	2.3	2.4	0	17.4
Flour, white	5 pounds	58.0	58.3	58.3	53.3	-.5	-.5	19.7	20.2	19.9	18.8	-2.5	-1.0
Apples	Pound	27.4	25.8	28.1	16.1	6.2	-2.5	7.4	10.2	7.9	5.0	-27.5	-6.3
Grapefruit	Each	18.2	13.6	18.1	10.7	33.8	.6	5.6	2.5	5.1	2.7	124.0	9.8
Lemons	Pound	30.1	28.6	25.1	18.4	5.2	19.9	11.1	9.1	6.9	4.2	22.0	60.9
Oranges	Dozen	85.4	82.3	102.2	66.0	3.8	-16.4	17.9	17.8	38.7	23.2	.6	-53.7
Cabbage	Pound	11.4	12.4	11.1	8.7	-8.1	2.7	3.5	3.2	3.6	2.4	9.4	-2.8
Carrots	Pound	19.2	16.6	16.8	14.5	15.7	14.3	7.8	5.1	5.2	3.7	52.9	50.0
Celery	Pound	19.9	19.1	17.1	15.3	4.2	16.4	6.7	7.3	4.5	4.4	-8.2	48.9
Cucumbers	Pound	22.2	27.9	20.6	--	-20.4	7.8	7.6	8.6	6.9	--	-11.6	10.1
Lettuce	Head	27.4	31.3	26.9	22.6	-12.5	1.9	8.3	10.5	8.9	6.0	-21.0	-6.7
Onions	Pound	14.7	13.3	14.9	10.1	10.5	-1.3	4.7	3.6	4.4	3.4	30.6	6.8
Peppers, green	Pound	37.1	42.9	33.8	--	-13.5	9.8	11.9	16.0	10.6	--	-25.6	12.3
Potatoes	10 pounds	88.0	82.5	83.2	58.3	6.7	5.8	24.2	27.5	23.2	17.8	-12.0	4.3
Tomatoes	Pound	35.7	45.8	33.9	30.1	-22.1	5.3	11.1	16.3	11.4	10.6	-31.9	-2.6
Peaches, canned	No. 2½ can	34.6	34.4	35.9	34.3	.6	-3.6	6.1	6.1	6.4	6.1	0	-4.7
Pears, canned	No. 2½ can	50.2	50.5	54.6	--	-.6	-8.1	9.5	10.3	13.1	--	-7.8	-27.5
Beets, canned	No. 303 can	18.2	18.2	18.1	--	0	.6	1.3	1.4	1.3	--	-7.1	0
Corn, canned	No. 303 can	23.8	23.7	24.5	17.8	.4	-2.9	3.0	3.0	3.0	2.4	0	0
Peas, canned	No. 303 can	25.0	24.7	24.9	21.0	1.2	.4	3.7	3.8	3.8	3.1	-2.6	-2.6
Tomatoes, canned	No. 303 can	19.7	19.6	20.5	15.6	.5	-3.9	3.6	3.7	3.9	2.3	-2.7	-7.7
Orange juice, concentrate, frozen	6-ounce can	24.4	24.9	21.6	23.4	-2.0	13.0	11.3	11.2	9.6	8.2	.9	17.7
French fried potatoes, frozen	9 ounces	16.3	16.1	15.5	--	1.2	5.2	3.3	3.3	2.1	--	0	57.1
Peas, frozen	10 ounces	21.0	20.9	20.8	19.9	.5	1.0	3.6	3.6	3.6	3.2	0	0
Beans, navy	Pound	19.6	19.6	19.6	16.3	0	0	7.1	8.6	8.7	6.9	-17.4	-18.4
Margarine	Pound	27.7	27.8	27.7	27.4	-.4	0	6.7	7.0	6.2	7.8	-4.3	8.1
Peanut butter	12-ounce jar	45.9	45.5	43.9	41.4	.9	4.6	15.9	15.7	15.5	14.1	1.3	2.6
Salad and cooking oil	24-ounce bottle	52.2	51.9	51.9	--	.6	.6	10.9	11.7	10.9	--	-6.8	0
Vegetable shortening	3 pounds	82.0	82.9	84.0	90.4	-1.1	-2.4	23.3	24.9	22.2	28.2	-6.4	5.0
Sugar	5 pounds	62.6	61.9	61.0	54.5	1.1	2.6	25.6	25.6	24.6	20.2	0	4.1
Spaghetti with sauce, canned	15¼-ounce can	17.5	17.4	16.7	--	.6	4.8	2.1	2.1	2.1	--	0	0

1/ Product groups include more items than those listed in this table. For example, in addition to the products listed--Choice beef, lamb, and pork (major products except lard)--the meat products group includes lower grades of beef, the minor edible pork products, and veal.
2/ Gross farm value adjusted to exclude imputed value of byproducts obtained in processing.
3/ Many retail cost and farm value figures for July-September 1968, have been revised; figures in other columns revised as indicated.
4/ For the bakery products group and the individual wheat products, the net farm value is based on the market price of wheat received by farmers plus the cost of the marketing certificate to millers. This cost is returned to farmers complying with the Wheat Program.
5/ Data for beef and pork have been extensively revised. For discussion of the revision see article in this issue "Revised Price Spreads for Beef and Pork".

Table 18.--Farm food products: Farm-retail spread and farmer's share of tbe retail cost, July-September 1969 April-June 1969, July-September 1968 and 1957-59 average.

Product 1/	Retail unit	Farm-retail spread 2/ July-September 1969	Farm-retail spread 2/ April-Juna 1969	Farm-retail spread 2/ July-September 1968 3/	Farm-retail spread 2/ 1957-59 average	Percentage change July-September 1969 from- April-June 1969	Percentage change July-September 1969 from- July-September 1968	Farmer's share July-September 1969	Farmer's share April-June 1969	Farmer's share July-September 1968	Farmer's share 1957-59 average
		Dollars	Dollars	Dollars	Dollars	Percent	Percent	Percent	Percent	Percent	Percent
Market basket	Average quantities purchased per urban wage-earner and clerical-worker housebold in 1960-61	702.43	3/684.20	684.15	594.78	2.7	2.7	41	41	39	39
Meat products		154.76	145.72	146.71	130.58	6.2	5.5	58	58	55	54
Dairy products		108.00	106.43	105.94	95.48	1.5	1.9	48	48	48	45
Poultry and eggs		40.27	40.54	38.55	36.74	-.7	4.5	58	55	56	61
Bakery and cereal products 4/											
All ingredients		139.74	138.28	137.71	117.85	1.1	1.5	19	20	19	21
Grain		--	--	--	--	--	--	14	15	14	16
All fruits and vegetables		189.55	3/184.06	186.48	152.91	3.0	1.6	26	28	26	25
Fresh fruits and vegetables		91.26	3/86.49	88.02	62.45	5.5	3.7	30	33	31	31
Fresb fruits		39.63	3/34.56	38.96	24.00	14.7	1.7	28	3/33	3/33	34
Fresh vegetables		51.63	51.93	49.06	38.45	-.6	5.2	31	33	30	30
Processed fruits and vegetables		98.29	97.56	98.45	90.46	.7	-.2	22	22	20	19
Fats and oils		28.10	27.67	28.46	26.37	1.6	-1.3	26	27	3/25	30
Miscellaneous products		42.01	41.51	40.30	34.85	1.2	4.2	18	18	3/18	18
		Cents	Cents	Cents	Cents	Percent	Percent	Percent	Percent	Percent	Percent
Beef, Choice grade 5/	Pound	38.2	3/29.4	29.8	29.8	29.9	28.2	62	3/70	3/66	62
Lamb, Choice grade	Pound	44.0	3/40.8	40.7	29.8	7.8	8.1	58	3/60	3/57	57
Pork 5/	Pound	30.8	3/31.3	32.3	29.5	-1.6	-4.6	60	3/56	3/53	51
Butter	Pound	21.9	22.2	22.8	20.6	-1.4	-3.9	74	74	3/73	72
Cheese, American process	½ pound	26.4	25.7	25.3	18.1	2.7	4.3	44	45	44	44
Ice cream	½ gallon	53.6	53.1	54.4	63.2	.9	-1.5	34	34	3/33	25
Milk, evaporated	14½-ounce can	9.1	8.9	9.1	8.3	2.2	0	49	49	47	43
Milk, fresh											
Home delivered	½ gallon	34.9	34.3	33.6	28.9	1.7	3.9	44	44	44	43
Sold in stores	½ gallon	27.7	27.2	27.2	24.7	1.8	1.8	50	50	50	47
Cbickens, frying, ready-to-cook	Pound	21.9	21.5	20.5	19.1	1.9	6.8	51	49	50	56
Eggs, Grade A large	Dozen	19.6	20.9	19.7	20.1	6.2	-.5	67	62	64	64
Bread, white											
All ingredients	Pound	19.7	19.6	19.3	15.9	.5	2.1	14	14	14	16
Wheat	Pound	--	--	--	--	--	--	11	11	11	13
Bread, whole or cracked wheat	Pound	28.3	28.0	27.1	--	1.1	4.4	10	10	10	--
Cookies, cream filled	Pound	45.7	45.5	46.7	--	.4	-2.1	9	9	3/8	--
Corn flakes	12 ounces	28.7	28.4	28.9	22.1	1.1	-.7	9	9	7	10
Flour, white	5 pounds	38.3	38.1	38.4	34.5	.5	-.3	34	35	34	35
Apples	Pound	20.0	15.6	20.2	11.1	28.2	-1.0	27	40	3/28	31
Grapefruit	Each	12.6	11.1	13.0	8.0	13.5	-3.1	31	18	3/28	25
Lemons	Pound	19.0	19.5	18.2	14.2	-2.6	4.4	37	32	3/27	23
Oranges	Dozen	67.5	64.5	63.5	42.8	4.7	6.3	21	22	3/38	35
Cabbage	Pound	7.9	9.2	7.5	6.3	-14.1	5.3	31	26	32	28
Carrots	Pound	11.4	11.5	11.6	10.8	-.9	-1.7	41	31	31	26
Celery	Pound	13.2	11.8	12.6	10.9	11.9	4.8	34	38	26	29
Cucumbers	Pound	14.6	19.3	13.7	--	-24.4	6.6	34	31	3/33	--
Lettuce	Head	19.1	20.8	18.0	16.6	-8.2	6.1	30	34	33	27
Onions	Pound	10.0	9.7	10.5	6.7	3.1	-4.8	32	27	30	34
Peppers, green	Pound	25.2	26.9	23.2	--	-6.3	8.6	32	37	31	--
Potatoes	10 pounds	63.8	55.0	60.0	40.5	16.0	6.3	28	33	28	31
Tomatoes	Pound	24.6	29.5	22.5	19.5	-16.6	9.3	31	36	34	35
Peacbes, canned	No. 2½ can	28.5	28.3	29.5	28.2	.7	-3.4	18	18	18	18
Pears, canned	No. 2½ can	40.7	40.2	41.5	--	1.2	-1.9	19	20	24	--
Beets, canned	No. 303 can	16.9	16.8	16.8	--	.6	.6	7	8	7	--
Corn, canned	No. 303 can	20.8	20.7	21.5	15.4	.5	-3.3	13	13	12	13
Peas, canned	No. 303 can	21.3	20.9	21.1	17.9	1.9	.9	15	15	15	15
Tomatoes, canned	No. 303 can	16.1	15.9	16.6	13.3	1.3	-3.0	18	19	19	15
Orange juice, concentrate, frozen	6-ounce can	13.1	13.7	12.0	15.2	-4.4	9.2	46	45	44	35
French fried potatoes, frozen	9 ounces	13.0	12.8	13.4	--	1.6	-3.0	20	20	14	--
Peas, frozen	10 ounces	17.4	17.3	17.2	16.7	.6	1.2	17	17	17	16
Beans, navy	Pound	12.5	11.0	10.9	9.4	13.6	14.7	36	44	44	42
Margarine	Pound	21.0	20.8	21.5	19.6	1.0	-2.3	24	25	22	28
Peanut butter	12-ounce jar	30.0	29.8	28.4	27.3	.7	5.6	35	35	35	34
Salad and cooking oil	24-ounce bottle	41.3	40.2	41.0	--	2.7	.7	21	23	3/21	--
Vegetable shortening	3 pounds	58.7	58.0	61.8	62.2	1.2	-5.0	28	30	26	31
Sugar	5 pounds	37.0	36.3	36.4	34.3	1.9	1.6	41	41	40	37
Spaghetti with sauce, canned	15½-ounce can	15.4	15.3	14.6	--	.7	5.5	12	12	13	--

1/ Product groups include more items tban tbose listed in this table. For example, in addition to the products listed--Choice beef, lamb, and pork (major products except lard)--the meat products group includes lower grades of beef, the minor edible pork products, and veal.

2/ The farm-retail spread is the difference between the retail cost and the net farm value shown in table on opposite page.

3/ Many farm-retail spread figurea for July-September 1968 have been reviaed; figures in other columns revised as indicated.

4/ For the bakery products group and the individual wheat products, the farmer's share is based on the market price of wheat received by farmers plus the coat of the marketing certificate to millers. Thia cost ia returned to farmers complying with the Wheat Program.

5/ Data for beef and pork have been extensively revised. For discussion of the revision see article in this issue "Revised Price Spreads for Beef and Pork."

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